DOCUMENT RESUME

ED 190 555 SP 016 506

AUTHOR	Dutkiewicz, Jody Steiner, Ed.
TITLE	Rocky Mountain Perspectives.
INSTITUTION	Loretto Heights Coll., Denver, Colo.
SPONS AGENCY	Office of Education (DHEW), Washington, D.C. Teacher Corps.
PUB DATE	May 80
CONTRACT	300-78-0333
NOTE	73p.: For related document, see SP 016 493.
EDRS PRICE	MF01/PC03 Plus Postage.
DESCRIPTORS	Agricultural Laborers: American Indians: *Cultural Background: *Differences: Educational Cooperation: *Educational Environment: Environmental Education: *Environmental Influences: Geographic Regions: Inservice Teacher Education: Migrant Education: Natural Resources: Outdoor Education: Preservice Teacher Education: *Regional Characteristics: Resource Materials: Rural Education: Teacher Centers
IDENTIFIERS	*United States (Rocky Mountain States)

ABSTRACT

This publication features articles detailing the state of educational programs in the Rocky Mountain area. The articles address: 1) the impact of physical geography on culture, education, and lifestyle: 2) the education of migrant and/or agricultural workers and their children: 3) educational needs of children in rural areas: 4) outdoor education: 5) teacher education: 6) resource staff and materials: 7) environmental education for Native Americans: and 8) improvement of the educational environment. Several Teacher Corps projects are described. (CJ)

****
* Reproductions supplied by EDRS are the best that can be made *
* from the original document. *
****

ED190555

ROCKY MOUNTAIN PERSPECTIVES

EDITOR

DR. JODY STEINER DUTKIEWICZ

U S DEPARTMENT OF HEALTH,
EDUCATION & WELFARE
NATIONAL INSTITUTE OF
EDUCATION

THIS DOCUMENT HAS BEEN REPRODUCED EXACTLY AS RECEIVED FROM THE PERSON OR ORGANIZATION ORIGINATING IT. POINTS OF VIEW OR OPINIONS STATED DO NOT NECESSARILY REPRESENT OFFICIAL NATIONAL INSTITUTE OF EDUCATION POSITION OR POLICY

SP 016 506

WITH THE ASSISTANCE OF

THE EDITORIAL POLICY BOARD

DR. JOHN CLAGETT
MR. JIM HEADLEE
DR. HARRY LEE
MR. LARRY MENDOZA

AUG 1 8 1980

ROCKY MOUNTAIN TEACHERS CORPS NETWORK

Dr. John Clagett, Executive Secretary
Dr. Mary Jo S. Dutkiewicz, Documentor
Ms. Albie Lees, Administrative Asst.

Board of Directors

12th Cycle Projects

Ms. Betty Marler
Loretto Heights College
Division of Youth Services

Mr. Norman Ward
University of S. Dakota
Freeman Public Schools

Dr. James Hook
University of Wyoming
Laramie County School District

Program '78 Projects

Dr. William Timpson
Colorado State University
Fort Lupton School Dist.

Mr. James Headlee
University of Wyoming
Arapahoe School District

Dr. Harry Lee
Eastern Montana College
Lame Deer Public Schools

Dr. Donald K. Lemon
University of N. Dakota
Turtle Mountain Schools

Mr. Clayton Small
Browning Public Schools
University of Montana

Mr. Mitch Chapel
Black Hills State College
Little Wound School

Dr. Luan Ferrin
Weber State College
Ogden City Schools

Teacher Corps is the program of the U.S. Dept. of Education, under the direction of Dr. John A. Minor, Jr.

BOARD OF DIRECTORS

BOTTOM ROW L TO R: L. FERRIN, B. TIMPSON, C. SMALL

TOP ROW L TO R: J. DUTKIEWICZ, D. LEMON, P. MESSER,
M. CHAPEL, H. LEE, J. CLAGETT
NOT PICTURED: J. HEADLEE

The Rocky Mountain Teacher Corps Network operates out of offices located at Loretto Heights College, 3001 South Federal Boulevard, Denver, Colorado 80236. The contract liaison is Academic Dean Tony Parimanath.

ACKNOWLEDGMENT

I wish to express my special appreciation to some of the persons who assisted in bringing this unique publication from conception to completion: John Clagett, whose vision started the discussion among educators in the region from which PERSPECTIVES evolved and who lent his editing skills; Cinda Roth and Jann Bass, for their artistic contributions and technical support; Albie Lees, for her proof-reading and typing skills; each contributor for working with me on a tight timeline. PERSPECTIVES truly represents a collaborative effort in the best spirit of Teacher Corps!

Jody Steiner Dutkiewicz
Denver, Colorado
May, 1980

Cinda Roth

Cinda Roth

Albie Lees
Administrative
Assistant

Cinda Roth

Jann Bass
Artist

Jann Bass

Cinda Roth
Photographer

Table of Contents

Pieces of the Pattern 13
Dr. John C. Clagett, Executive Secretary, Rocky Mountain Teacher Corps Network, Denver, Colorado

Educating the Children of Colorado's Agricultural Laborers: The Real Issues 31
George Wallace, Teacher Corps Associate Director, Colorado State University, Fort Collins, Colorado

Meeting Inservice Needs of Rural Wyoming Schools 41
Dr. Laurence A. Walker, Dean, School of Education, University of Wyoming, Laramie, Wyoming

Education in the West: A Closer Look 49
Dr. Luan Ferrin, Teacher Corps Director, Weber State College, Ogden, Utah

Collaboration Between Black Hills State and Little Wound School For Improved Teacher Training 61
Mitch Chapel, Teacher Corps Director, Black Hills State College, Spearfish, South Dakota

Developing the North Dakota Whole State Catalogue 73
Dr. Lowell Thompson, Associate Professor of Education, University of North Dakota, Grand Forks, North Dakota

A Native American Environmental Education Approach for Montana and Wyoming 87
Dr. Donald F. Darling, University of Montana Teacher Corps Coordinator, Missoula, Montana

Serving Inservice for the Northern Plains 103
Dr. Paul Otto, Associate Professor, School of Education, University of South Dakota, Vermillion, South Dakota

Improved School Climate: A Case for Expansion 111
Dr. William Timpson, Teacher Corps Director, Colorado State University, Fort Collins, Colorado

Isolation: A Matter of Miles and Attitude 121
Dr. Donald Lemon, Teacher Corps Director, University of North Dakota, Grand Forks, North Dakota

Outreach and Inservice Education in Montana: A New Technology for an Old Problem 129
Dr. Harry Lee, Teacher Corps Director, and Dr. Franz A. Nowotny, Dean of Extended Studies and Community Service, Eastern Montana College, Billings, Montana

INTRODUCTION

The current form of the Rocky Mountain Teacher Corps Network began operation in August of 1978. Our contract with Teacher Corps and the Office of Education for services to them and funded projects in Region VIII was intended to be programmatically continuous. Unfortunately, that is not the case, as we will end operations in July of 1980. Although we are personally frustrated at our loss of opportunity for developing new bases for networking in a regional context, we accept the Congress' and nation's need for balancing our federal budget. The Network's premature ending, however, has forced us to move more quickly in some activities than had been originally intended.

In August of 1978, Network project directors began a dialogue about the unique circumstances and characteristics which make living and learning here different from other areas of the country. The dialogue surfaced a wide variety of "differences" which seemed worth pursuing in a more formal manner. This regional perspective represents a quickened attempt on the part of educators from our region to share some "lessons learned" with a broader spectrum of the educational community.

The theme which united these "lessons" has its origins in the impact of a region's natural features on its educational environment. The interrelatedness of humans with the particular place where their learning occurs is relatively undocumented in the education profession, except in micro-studies of classroom characteristics. Our perspective is much broader in scope than a single classroom's or school's environment; instead we are concerned with documenting a region's impact on learning in the more global parameters of topography, climate, isolation, indigenous tradition and culture(s).

We have intentionally chosen to print our Perspectives in a looseleaf form, so that contributions can be removed for copying and other uses, and the collection itself can be added to, as the reader feels appropriate. We intend this collection to be useful and recognize its current limitations in comprehensiveness, personal bias, and diverse style of writing. We further expect that readers should and will be able to expand on our efforts.

1980

PIECES OF THE PATTERN

by John Clagett

To be human is to be fixed in time and space. The limitation implicit in this causes individual learning/knowing to occur uniquely for each individual. Environmental characterstics effect learning by narrowing the universe of experiences available which hold potential for learning. Education research indicates that the child who grows up on a large ranch and attends a one room school will know things differently from a child who grows up in a crowded urban setting.

"Oh beautiful for spacious skies,
for amber waves of grain,
for purple mountains majesty,
above the fruited plain."

The above lines from the song "America" describe the Rocky Mountain and Plains regions of the United States. Although this description is somewhat poetic and unemperical, it adequately describes the areas' principal natural features. Recently neurobiologists and educators have begun to speak of two distinct fields of knowing. One of these is associated with empericalism, logic and fact. The other field of knowing has to do with patterns, instincts and unconscious or non-language feelings which "explain" an event or experience. In writing this paper, I have tried to mix some factual bits of information with subjective impressions in a manner which transcends the few examples used as illustrative benchmarks.

●

One approach to an understanding of the Rocky Mountain and High Plains regions could begin with looking at a Road Atlas. On the page which has a map of Montana, you nocice that there are counties by the names of Beaverhead, Bighorn, Carbon, Deer Lodge, Glacier, Golden Valley, Sweetgrass, Wheatland and Yellowstone, along with a sprinkling of Lincoln, Jefferson and Madison (people-type) names. The demographic historical point of this is that, under "The Big Sky" when people referred to places and subsequently named them, the popular name derived from natural features of the land itself - as opposed to people derived names, as is the case in political subdivisions elsewhere which bear the names of their "conquerors" and political sponsors. To take this point further, use your imagination to consider how Ten Sleep, Wyoming, got its name or Hungry Horse in Montana or Wounded Knee in South Dakota, to indicate but a few. Did you know that the main street of commerce in the State Capitol of Montana is named Last Chance Gulch? The conqueror's notion in many places, although not absent here, is certainly secondary to events and natural phenomena as a resource for place labelers.

Perhaps it is true that here topography, land, weather and events have a greater impact on the people than elsewhere because another of our characteristics is our relatively low population density. Consider that the six states which make up the Rocky Mountain Network rank by size and population at the extremes for the nation.

Size		Population
4th largest	- Montana	42nd largest
8th "	- Colorado	28th "
9th "	- Wyoming	49th "
11th "	- Utah	36th "
16th "	- South Dakota	43rd "
17th "	- North Dakota	44th "

A disparity between size and population leads obviously to low densities of people per square mile. The average density in the U.S. is 57.5 as compared with these states from our region, and a representative sample from other regions:

Our Region		Other Regions	
Montana	5	Washington, D. C.	12,402
Colorado	21	Texas	43
Wyoming	3	Pennsylvania	262
Utah	13	Alabama	68
South Dakota	9	California	128
North Dakota	9	Maine	32
		Oklahoma	37

Numeration facts, however, do not describe how regional people live, except they underline the reality that predominately our towns are small and far apart; our geography is distinctly vertical and horizontal in natural scale and, thus, it is perhaps natural that we are more impressed by land-forms than contrived structures.

●

Economically, the region is characterized by its almost complete absence of heavy industry and near complete dependence on service, mining and agricultural bases of capital and employment. Several national magazines in recent years have indicated that the economic future of the west will be determined by decisions which are made now about water allocations. Annual rainfalls for the states in our region are relatively low, ranging from eleven to near nineteen inches. However, more important than the absolute quantity of precipitation for most of the region is the portion which constitutes accumulation in the form of snow in the mountains during the winter. This melting snowpack is the source of our rivers and streams, which are the significant reservoir of water for cities, ranches and industry. To put this in perspective, you should know that in Wyoming the average ranch or farm is 4,274 acres compared with an average for the U.S. of 440; the superficial assumption would be that a Wyoming ranch would be ten times as profitable as the average in the U.S., but this is not so. 1976, for instance, was a bad year for Wyoming farmers and ranchers; they averaged a net income of $241 or 5¢ per acre for a year's labor. The reasons for this are many and not always obvious; for instance, it takes nearly 35 acres to market-raise only one head of beef in Wyoming; whereas, in more precipitous states, it takes about 4 acres. A large part of this discrepancy is due to climatological differences in the forms of precipitation. The plant growth potential between areas that receive twelve inches of rain or snow and those that annually receive twenty are dramatic. The obvious agricultural solution would be in irrigating the land from the rivers; however, here you should know that the federal government will only allow diversion for irrigation from federal streams sufficient for 160 acres of land. By this resource limitation, the rancher with 4000-plus acres can convert less than 4% of his land to feed production to supplement the already sparse ground cover available for grazing.

Newsweek magazine for September 17, 1979, indicated another perspective on the west's low density issues; the federal government owns vast acreage of the west in the form of forests, wilderness areas, parks and other "public" lands. In Wyoming, 48% of the state is federally owned and administered. In Utah, the

federal ownership of the state is 66%. During recent years, Congress has consistently sought to expand these holdings; and the local effect of this is that individual private usage interests in land are often thwarted because of the federal regulations which apply to adjacent properties. Federal congressional solutions to the west's economic problems are difficult to achieve, again because of the low population. The six Rocky Mountain and High Plains states elect 13 of the 435 members in the House of Representatives. This is 3% of a lawmaking body who collectively control by ownership 1/3 to 1/2 of the land, forests, water and minerals for the region.

Another perspective on the weak economic base inherent in low population/high acreage relationships is the affinity the people here feel for the land and the wilderness. It is inconceivable that western art, literature and music would be anything except landscapes and stories of events in conflict with nature. The historical stereotypes of rugged individualism prevail to contemporary times. The "Don't Fence Me In" mentality is manifest not just in terms of political isolationism, but also in the life styles of residents. Our cars tend to be pick-ups and four wheel drive varieties. Our vacations tend to be camping, hunting, hiking, skiing, fishing and other outdoor activities.

●

If you have never experienced the Big Sky of Montana, it is difficult to realize how aptly named it is. Teton and Glacier Parks are awe-inspiring in their serene majesty. Yellowstone Park is dramatic; not just for its thermal activity but also for the opportunity to be in personal contact with bears, buffalos, elk, moose, wolves and eagles - on their own turf. The Missouri Breaks, the Black Hills, the Badlands, Monument Valley and numerous other wilderness areas need to be experienced to get a perspective of our human place in the cosmos. The price of a house here is determined as much by the panoramic view it provides, as by the materials that went into its construction.

The general geologic history of the area resembles a layering of events on events, mountains on mountains, alluvial plains on acient lake beds, compounded by glaciation and erosion. One hundred million years ago the area was submerged, making Utah and areas further west on what is now the North American continent an island; the shore of that island roughly corresponded to the location of the present Rocky Mountain range. Two million years ago, the Pleistocene period of glaciation was at its peak. Associated with these two geologic periods were most of the events which are responsible for the views of land in the region we are familiar with today. The Rockies are formed and being formed by great folds in the earth's crust and fault blocking at weaker points in these folds. The High Plains are formed by sediments of the ancient rivers, which were blocked by the glaciers, and the continuing washout of the Rockies as they break down. Both of these geologic oversimplifications understate the complex processes involved, and the time factors of alluviation and lifting.

●

Montana and Wyoming in recent years have been found to be repositories of vast quantities of dinosaur remains. The Plateau region of southeastern Montana has provided many skeletons of dinosaur types (particularly the larger ones) not found elsewhere in the country. Dinosaurs and men were not historic contemporaries, but it is significant to note that this same area - the east face of the Rockies and adjacent Plains - were later the grazing range of the great buffalo herds of the continent. Until relatively recently the High Plains have been in effect a Seregeti for roaming animals, sheltered on the west by the mountains and on the east by the Missouri/Mississippi River system. In fact, the high mountains are a refuge for the last of many of America's big game animals.

Currently the balance between preservation of trophy species and development of the land's resources for economic interests creates a highly politicalized issue each year. The Fish and Wildlife Department of each state's government is in effect a democratic microcosm of the state's relations with the ambiguities of civilization where weather factors, tourism, developmental interests and ecological conservation rise like a phoenix from the ashes of each previous year's hunting/fishing permit allotments.

Annually, bear, elk, moose, deer, mountain goats and sheep, antelope and various other animals are "harvested" to a herd size which is theoretically appropriate for the states' interests. Winter comes and is either beneficial or not, to determining "appropriate" herd size. Birthing in the spring creates new herd configurations, as do new demands on land for development of various types. In late spring and early summer, data is gathered about the number of various wildlife species that have survived the winter, where they are located, the potential grazing quality of the ground cover in those areas and a plethora of other information. This data is thrown into a pool of competing land usage data from the various bureaus of the state government. Lobbies representing the interests of businesses, agriculturalists, hunters, ecologists and conservationists seek to influence officials who ultimately determine the next year's quotas in specific regions. When these are announced, the local newspapers become filled with angry letters to the editors from hunting guides who want longer seasons with many non-resident permits issued, resident sportspeople who want longer seasons but fewer non-resident permits and farmers who want shorter seasons and extended closed areas. Then, when the season begins again in the fall, the battle continues because the weather of the moment also helps determine the size of the "harvest" for species of elk and deer. When and how snow falls greatly influences the number of kills; thus, subject to 48 hours notice, a region can be shut down for hunting in order to fine-control herd sizes. Always there is controversy in this matrix of official guesses and hard decisions. The animal harvest scenario is but one of the differences in personal emphasis which are somewhat unique about our region. Others, perhaps as apt, could be described centering on boomtowning, around mineral resources, or rodeoing, or cattle marketing experiences. However, that is not our principal concern here.

●

Earlier I noted that western art, literature and music are inconceivable except as portrayals of natural panorama and clashes of man and environment. This is also significantly true in generalizable terms about formal education here. Topography, weather and politics are an integral part of education, not only as curricular subjects but as important characteristics of the environment which surround and are the context out of which learning occurs at the personal level. Each provides a higher than usual degree of uncertainty.

For the region's two most populace states - Utah and Colorado - the human population is essentially compressed into small areas of the state. Eighty percent of Utahans live between Provo and Logan, along the western face of the Wasatch Mountains. A similar proportion of Coloradans live between Pueblo and Ft. Collins, along the east face of the Rockies. Typically throughout the Rocky Mountain and High Plains, schools are small with only two or three classrooms. It is not unusual for teachers to receive housing in lieu of a portion of their salary. Most of these schools exist in isolated areas far removed from traditional support systems for teachers. The isolation is particularly felt in the winter, which tends to be long in duration. A growing season of seventy-five days (between last frost and first frost) is considered fortunate. The winter snow can start accumulating in September and October. Although total snow accumulation (except in the mountains) may not exceed 100 inches, it all tends to stay around until June - drifting this way and that. The snow is dry by most standards and consequently more subject to drifting when driven by the winds, which build up in the mountains and carry across the plains relatively unchecked. In North Dakota and Montana fifty and sixty degrees below zero temperatures are not unusual in January and February with wind chill factors in the minus 100 degree range. Because this cold is dry, it is not as penetrating as more humid cold spells. The locales in the region which get warm winds (chinnoks) during the winter are often referred to as our banana belts. The particular configuration of mountains around Billings in Montana, the Black Hills in South Dakota and Laramie in Wyoming, create this effect. Other areas, because of their consistently below freezing weather, fight a constant battle with drifting snow which closes roads and creates further isolation. One sure way to spot a regional resident in his or her car, other than by looking at their license plate, is to notice that there is an electrical cord dangling out of the grill. Most everyone in the region has a preheater built into the radiator of their car so that they can leave it "plugged in" at night to their house current, or on milder days preheat it for an hour or so before trying to start the engine.

●

The story is told in "Indian Country" that a hundred years ago when General Custer left for the Little Big Horn, he told the Bureau of Indian Affairs not to do anything until he got back, and they have not. The last several hundred years of history for Native Americans is, I assume, familiar to most people at the superficial level. The land was stolen from them; many tribes were decimated by wars and disease. Treaties were signed and broken consistently; Indians were forced to reservations on unwanted land. Federal and state programmings were directed toward first making farmers of "Indians" and opening them up to missionaries for conversion from their "pagan" ways; later assimilation and termination are planned to assist them in becoming "regular citizens." More recently (since 1975) "self-determination" has been a thrust in federal programs for reservations.

Although the ways of dealing with "Indians" have gone through many evolutions, the fact of their special status has consistently been a mixed blessing unlike that of other minority groups. There is an accepted legal definition of "Indian", a separate Indian federal bureau in Washington, D. C.; a whole field of law which centers on their rights and responsibilities. Each federal reservation is in effect a sovereign nation within a particular state, whose status derives from treaties with the federal government in the same way the government has treaties with Spain and Israel, for example.

This "special status" has had two contradictory effects. On the one hand, it has helped to preserve some individual tribal cultures; on the other, it has

made them legally conspicuous in ways which are disadvantageous to their continuation as a unique culture. It is often incredulous to people that "Indians" prefer to live on their reservations with little opportunities for employment, poor housing, and few if any options for shopping and contemporary entertainment. The general outside view of reservations is that they are scrubby land, with shacks and brokendown homes, dark crowded stores with overpriced goods, and no places to go for "the good things in life."

To an outsider, the land may appear relatively unexploitable but that may be because he/she looks through economic eyes and feelings, when from a traditional perspective the "land" has other uses which have to do with cycles of life and seasons and is important for purification, renewal and identity. The stores, which to the outsider appear inferior to "civilized" supermarkets, are often not important in themselves as places to buy goods but rather as meeting places for cultural interaction. Most reservations also have a great deal of "religious" activity going on year-round. In most Indian communities you will find Catholic, Latter Day Saints, Mennonite and Protestant churches which co-exist with traditional cultural/purification ceremonies such as Sun dances (summer), sweat lodges (all year) and pow wows (every few weeks). Dancing is no mere tourist carnival; it is an occasion for renewal where various singing/drumming clubs are invited to perform along with the many types and forms of dancing groups. A pow wow is also very much a community-wide activity, for all ages, wherein tribal and family relationships are renewed. Although many tribal members leave the reservation for varying lengths of time and purposes, it is often a leaving with sacrifice of primary ties and connections.

It is important to note here that, up to this point, I have been generalizing about "Indians" when in fact they are not generalizable. Traditional tribal members do not consider their primary identity to be Indian at all, but rather Blackfeet, Cheyenne, Arapahoe, or whichever tribe they are formally listed on the roles for.

The truth of the matter is there is no Indian culture but, instead, there are many unique cultures which are for the convenience of others grouped under the heading of "Indian." The differences between Sioux (in its many subvarieties) and Snoshone are dramatic and significant in cultural terms as we are familiar with them. The federal government recognizes and has separate treaties with over 300 tribal groups, not one treaty and automatic set of programs for all "Indians."

Compounding this set of differences among tribes are the varying degrees of traditionalism exhibited by and within individual tribe members. If a tribe's government attempts to set laws which are designed to preserve the culture, then how does it deal with the mix of bloodedness in its members?

The "special status" tribes have expose them to being convenient targets of prejudice, which can manifest itself in legal as well as social ways. In other words, Indians - if one feels ill towards them - can be attacked through socially acceptable channels by legally limiting their rights and conditions in the name of the common good. Two current examples of this special vulnerability are in the news in Montana now. One has to do with the state's proposals for reallocating water resources and the other is associated with the state's proposed severance tax on coal mined there, most of which is on reservation lands.

My final descriptive example of difference derives from the unique conditions which surround the needs of teachers. The weak economic base of our region, associated with a low tax supporting base in population, is in turn responsible for relatively thin support for teacher training. In our publicly supported higher education institutions, quality professional programs exist, but, generally, these do

not have a lot of depth and breadth in alternatives. Characteristically, the institutions themselves do not support significant amounts of research and experimentation, although opportunities are available for outside sponsored work. The institutions exist atypically from the regions they serve because they are in urban areas. The economic and logistical limitations of remote field experiences for preservice and inservice training tend to prevent them from occurring.

Thus, the professional training programs tend to be traditional and copies from areas having much different cultural and demographic characteristics. As noted earlier, the most frequently occurring school in the region is the few-classroom-multigraded sparsely staffed building at a crossroads or small town many miles distant from population centers and institutions of professional training. Consequently, not only is the teacher trained under a model of training which bears only superficial resemblance to the reality of their job resources, but also teachers' opportunities for regular collegial inservice are more remote. In some way it is surprising that, given these unusual characteristics, the quality of the education afforded our children is as high as it is. (The children are not low on nationally normed tests.)

School calendars are also frequently unique with closings for spring or fall roundup, planting and harvesting, or the beginning of hunting season, or because the basketball team is playing out of town. (Recently they had to temporarily close the local bank in Browning, Montana, because everyone tried to cash their check at the same time so they could go to the basketball tournament in Billings.)

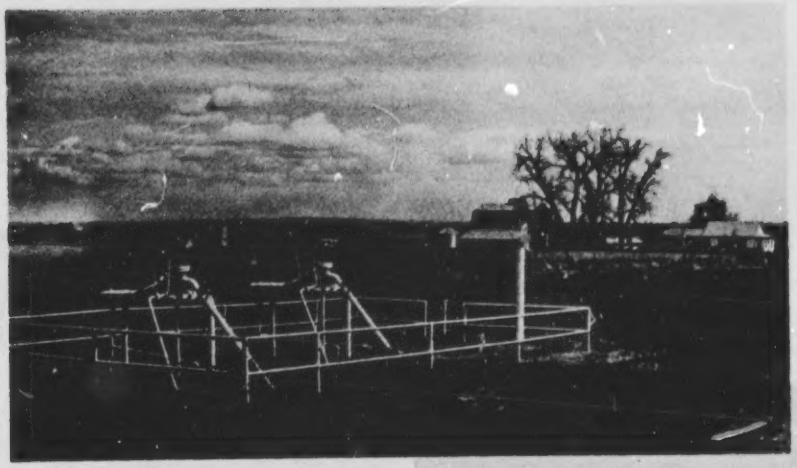
Because of these many differences, which have their origins in the particular way our land is formed, a teacher in a school here can often feel a special affinity for history lessons about the frontier which, in many ways, has not yet passed.

There is no easy way to study our region and its unique contributions to learning, just as there is no easy way for an author to feel that he/she has given sufficient clues to a reader so that the reader will understand. Therefore, it is with a vague uneasiness and feeling of abruptness that I conclude suggesting perspectives on the pattern which describes our region.

Cinda Roth

Linda Roth

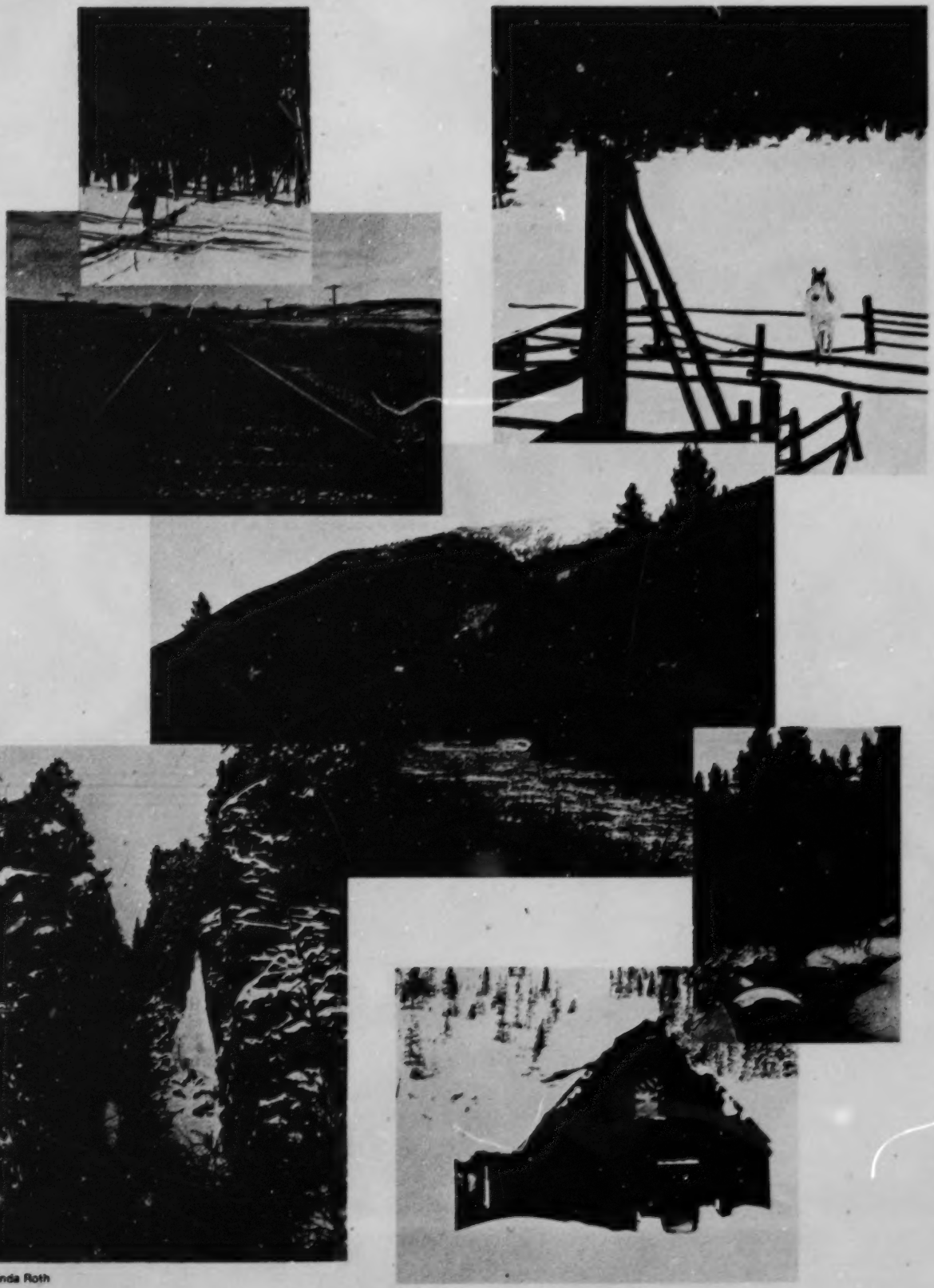
Claude Roth



Cinda Roth

Cinda Roth

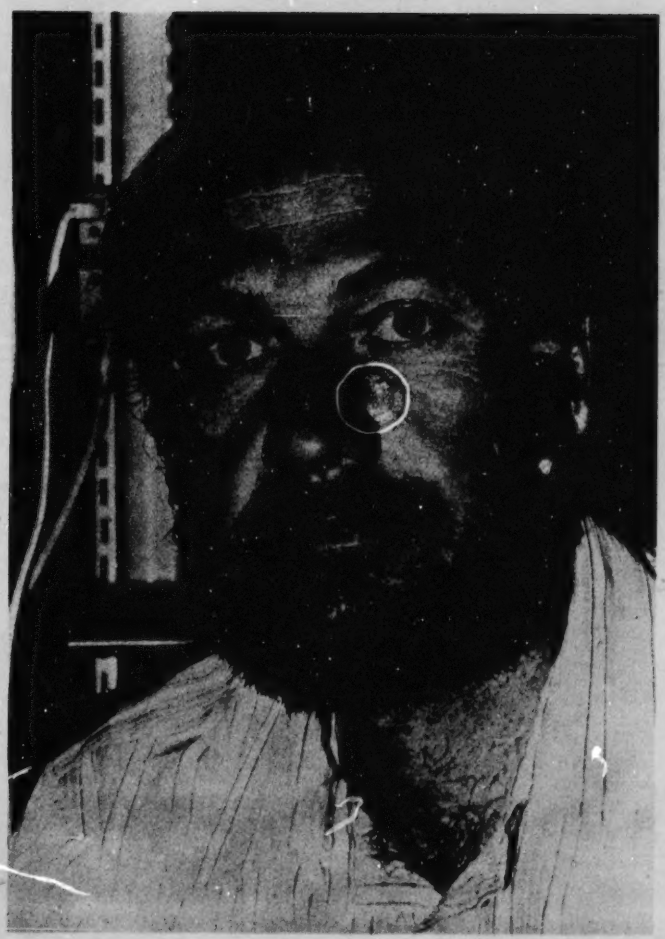
18



Cinda Roth

EDUCATING THE CHILDREN OF COLORADO'S AGRICULTURAL LABORERS: THE REAL ISSUES

by George N. Wallace



Cinda Roth

INTRODUCTION

In 1967, the year Title I Migrant Education began in the U.S., only twelve out of the 650,000 migrant students in the United States tracked by U.S.O.E. graduated from high school.[1] As late as 1977, it was estimated that 91% of all migrant children would not graduate.[2] In no other area of public education can such shocking, almost unbelievable, statistics be found.

This author worked for six years in Colorado with many others to improve the school experience for migrant children. During the 70's those of us who worked with migrant education gave a good deal of attention to the compensatory measures that local, usually rural, school districts could utilize in order to keep more migrant students in school and to give them adequate school experience. Much was done to develop and improve the use of a National Migrant Student Record Transfer System, so that teachers would have background information and educational records for new migrant students arriving in their classrooms. Teachers were given training in teaching English as a second language, and more teachers in Colorado were hired and trained to teach academic subjects in either Spanish or English. Many new materials, not previously utilized by rural school districts, were developed or purchased specifically for migrant students and circulated with supporting demonstrations in their use by means of large mobile vans. Local school districts and the Colorado Migrant Council expanded summer programs to include preschoolers. More parent participation was cultivated through family-contact workers, back-to-school nights, and field trips. Additional time was spent with the growers who hired migrant labor, in order to involve them in a number of ways. In spite of these and many other improvements in migrant education, and in spite of the efforts of thousands of individual educators in hundreds of rural school districts, our record of school success with the children of seasonal agricultural laborers remains poor.

Changes in migrant education occur slowly, frequently because the efforts of educators are constantly being undermined by larger and more pervasive socio-political and economic issues. (Like all professionals, we may be subconsciously reluctant to look broadly at the real causes behind those problems we have been hired to remedy.) It is this author's contention that the problems of educating the children of Colorado's seasonal agricultural workers will remain unsuccessful until there is a greater promise of stability and community participation for their families. The remainder of this article, therefore, does not pertain directly to what educators might do to improve their classrooms for the children of migrant workers, as important as that continues to be; my remarks address, instead, the more urgent issues that currently prevent seasonal agricultural laborers and their families from having the kind of working and living conditions that can provide a cohesive and cumulatively meaningful social experience. In the past, most migrant families had a continuous and annually recurring relationship with particular growers and communities. Today, the deterioration of these patterns, along with a large influx and utilization of undocumented workers, the worsening living and working conditions, and the complete lack of any plan or legislation to address the problems (other than cosmetic attempts such as Migrant Education), have resulted in making seasonal agricultural work less than stable, less dignified, and less understood than fifteen years ago.

UNDERSTANDING THE ISSUES

Undocumented Workers

It is important to understand exactly what portion of the population is involved in the term "migrant labor". Many are seasonal agricultural laborers that move from place to place to perform a specific kind of work, e.g., planting, cultivating or harvesting fruit and vegetables. Other seasonal laborers do a variety of work for particular growers during the spring, summer and fall and move about to a lesser degree. Others, still classified as migrant workers, have actually settled out of the migrant stream and are residents of a particular community or farm. Many migrant laborers are long-term U.S. citizens (a fact frequently unrecognized) and shall be referred to as "domestic farmworkers" in this article.-

Included within the various groups of migrant laborers are increasing numbers of undocumented workers, or illegal aliens who are doing much of the seasonal agricultural work and whose children are appearing with more and more frequency in both rural and urban classrooms. (Recent studies have estimated the number of undocumented workers and their families in the United States at anywhere from five to eleven million people; however, this number fluctuates and is almost impossible to document.) Undocumented families live with the constant fear of exposure, apprehension and deportation. A family in this situation, although performing a needed task in the community, cannot become a visible part of society. Instead they become part of the "working underground." Since both undocumented and domestic farmworkers often share the same ethnicity, culture and languages, part of the stigma of being "illegal" is transferred to all farmworkers of Indo-Hispanic origins. The presence of a large and easily exploitable undocumented labor force makes it difficult to improve conditions for all agricultural laborers, including those who are U.S. citizens.

George M. Wallace

Living and Working Conditions

Current working conditions for many agricultural laborers are marginal, especially in the case of the undocumented worker who has almost no rights, no minimum wage, no bargaining power, and substandard housing. Perhaps the most detrimental factor to the education of the children of both domestic and undocumented workers, is the fact that most of these families are deprived of any long-term emotional, or psychological investment in a community and are rarely seen by others as legitimate members of a community.

Without the appropriate legislation to deal with the undocumented worker situation, it will be difficult to improve conditions. Undocumented workers are at the mercy of the crew leader or the employer's benevolence. Many domestic or documented laboring families have been displaced from work or find themselves with lower wages, poorer housing, and a weakened sense of belonging to the communities where they are employed.[3] In recent years, there has been the increased use of labor crew leaders or middlemen who typically do the negotiating with producers rather than the families themselves. In the process, the relationship between employee and employer becomes twice removed; this tends to break down any sense of mutual responsibility toward one another. Due to such isolation in the work situation, there is less likelihood that farm laboring families will be integrated into their host communities, or that the work they do will be given dignity. This in turn makes it more difficult to provide continuity in health, education and other services. Again, there seems to be a phantom labor force, not really existing publically, yet doing needed and difficult work for all of us.

Attitudes About Agricultural Labor and Its Future

Problems of migrant farmworkers are compounded by a "head in the sand" attitude held by the majority of our society about agricultural labor. Most people appear to assume that the need for agricultural labor will eventually disappear as agriculture becomes increasingly mechanized; they feel that the United States has somehow progressed beyond that sort of work. Furthermore, since much of this agricultural labor is being performed by undocumented workers having low visability, few rights and making few demands, people can conveniently assume that the problems either do not exist or will take care of themselves. In general, the public considers migrant farm work to be undesirable. "HELP MIGRANT CHILDREN DROP OUT...OF THE FIELDS", reads a popular Title I migrant education poster of the 70's. Part of the message was that the work of their parents was undignified, and that if society could just reroute them away from agricultural labor, perhaps the entire occupation would go away.

In sharp contrast with the prevalent uninformed attitude, there are many reasons - some dealing with waste, some with energy efficiency, some with consumer preferences - suggesting that agricultural labor is likely to be with us for a long time. A number of researchers are now suggesting that all mechanized agriculture is not as efficient as previously thought.[4] For some crops, there may be a middle level of technology that uses less energy[5], more human labor, that is more efficient in terms of kilocalories put into a crop, when you compare the kilocalories yielded from that crop. The idea that the energy inputs into food production should not overall exceed the energy value of that food is relatively new. As the era of cheap energy ends, it is impor-

tant to anticipate future agricultural labor needs in light of such new research, and the future needs and preferences of society. (It is possible to hybreed fruit and vegetable varieties, for example, that can better withstand mechanical harvesting, but more waste is involved, flavor is sacrificed, and good quality is reduced.)

If the United States is to produce the food that is needed, the way most people like to eat it, using a reasonable amount of energy in the process, we must also provide a minimal standard of living and dignity for the workers who are likely to make that possible. If we continue to act as though this sort of work will not have to be done in the future, when in fact it does have to be done, it can only catch up with us at a later date.

George N. Wallace

DEALING WITH THE ISSUES

A number of potential remedies do exist for the problems just described and should be promulgated as topics for discussion by rural educators, and community and agricultural leaders. Solutions can be initiated in both the informal extra-school community setting which rural educators are typically involved in, or within the framework of professional organizations or unions. Included in those topics needing immediate attention are the following:

Amnesty and the Adjustment of Status for Undocumented Workers

Many undocumented families have lived in the United States for several years and their children have been in school, learned English and are accustomed to life here in spite of the irregularities surrounding their lives. The parents of these families are seldom unemployed or on welfare.[6] Most wish to stay in this country and, having done some of the country's hardest work for several years, certainly deserve to be free from the fear of deportation. Most undocumented families who have been here longer than a year want and deserve at least an immediate adjustment of status to that of "Temporary Resident Alien". This alone would do much to remove the fear, stigma and illegitimacy felt by countless thousands of school children and their families; it would in turn improve the school experience and set the stage for giving dignity to this work.

President Carter's Amnesty Plan (proposed in 1979 and never enacted) suggested a seven year residency requirement in order to qualify for the "Permanent Resident Alien Status" which can lead to citizenship.[7] This was a start; however, residency would prove to be very hard for most undocumented workers to verify. Past employers would be reluctant to disclose that they had not only employed undocumented workers, but had also, in most cases, paid no withholding taxes. Many employers will not remember employees with whom they were unable to speak and with whom they communicated only through the intermediary crew chief. The seven year residency requirement of Carter's plan would have made it almost impossible to gain resident alien status.

To be effective, an amnesty proposal must place more emphasis on equity, especially utilizing recent work history, family, school and community ties as the criteria for granting any adjustment of status. It should also be made clear that, within a certain length of time after any adjustment in status, adult family members would be eligible to apply for citizenship - with the requirements clearly defined. For the sake of all agricultural laboring families, legislation must be reintroduced to allow undocumented laborers to emerge and work towards becoming fully participating members of the communities where they live. This is also an important first step in formulating a plan that will ultimately stem the flow of undocumented workers into this country.

Granting of Temporary Visas or Work Permits

There are many economic interests wishing to see a continued supply of cheap labor into the United States. The proposed Carter Amnesty Plan, for example, included a provision to allow a continued supply of temporary labor into the country through what was called an "H-2" visa.[8] Stringent requirements must be placed on this type of temporary visa or work permit, if conditions are to improve for domestic laboring families and for those aliens granted adjustment of status. If the supply of exploitable labor can be limited, many domestic farmworkers who have left the agricultural labor force will return to those jobs once conditions improve. Some domestic families have dropped out of the migrant stream; this makes it appear, incorrectly, that labor from outside the country is needed.

Programs that Match up Producers Having Work with Those Documented Workers Needing Work

Once amnesty and adjustment of status becomes a reality, there must be a system whereby stability is restored to the mechanisms by which labor needs are anticipated and contact is made with the producers. Many producers now turn to illegal labor because no system currently exists. Using extension agents, farm organizations, state divisions of employment, migrant councils and computer technology, it should be possible to make the badly needed labor/employer match-ups that would eliminate the employer's fear of government sanctions (also included in the Carter Plan, along with strict border patrol tactics) and the laborers fear of being displaced by undocumented workers.

Hopefully, these match-ups would evolve into the ongoing relationships between growers and laborers that were common prior to the influx of undocumented

workers in the 70's. These more stable relationships, where families returned to a community year after year, have been severely disrupted and will require regeneration measures.

Housing Agricultural Labor in Rural Communities

A lack of good housing is a major deterrent to the rural community's ability to utilize documented sources of labor. Most rural labor housing is old and was built when construction costs and standards were lower. Owners are frequently cited for violation of standards. Today, while many undocumented workers are glad to have the housing, most domestic[9] laboring families find it substandard. Farm prices do not reflect the cost of building or maintaining labor housing (or most other labor related costs). As a result, houses are not being repaired or replaced. There is an obvious need for revamped federal or state cost-sharing programs and/or for the establishment of more rural housing development corporations, such as the Granada Colorado Model.[10] Eventually, labor housing should be reflected in the price of food rather than through government subsidy. The American food basket is still the cheapest in the world. There is little reason to expect the producer to absorb the entire cost for improved labor housing and other minimum improvements, which would result in a standard of living taken for granted by nearly all others in American society.

SUMMARY

A prerequisite for providing a successful school experience for the children of America's agricultural laborers is that educators and others must do what they can to stabilize, and give dignity, to the position held by migrant families in rural communities. The issues involved go beyond the schoolhouse and require rural educators, and others, to become aware of and involve themselves in the legislative and other efforts needed in order to see such improvements realized for America's agricultural laborers and their families.[11]

[1]"U.S.O.E. Task Force Report on Rural & Migrant Instructional Strategies," 1979.

[2]Keynote Address by Congressman Ford (D-Mich) at the Annual National Migrant Education Conference. 1976.

[3]From interviews with domestic farmworkers conducted by the author during the summer of 1977.

[4]Steinhart & Steinhart, "Energy Use in the U.S. Food System," Science, Vol. 184.

[5]Lappe and Collins, Food First, Houghton Mifflan, 1977, pgs. 156-58.

[6]Villalpando, Manual Victor. "Illegal Alien Impact on the County of San Diego," San Diego Human Resources Agency, 1977.

[7]"Undocumented Aliens Fact Sheet," Summary of the President's Proposals - From White House Press Secretary, August 4, 1977.

[8]Ibid. Summary of President's Proposal.

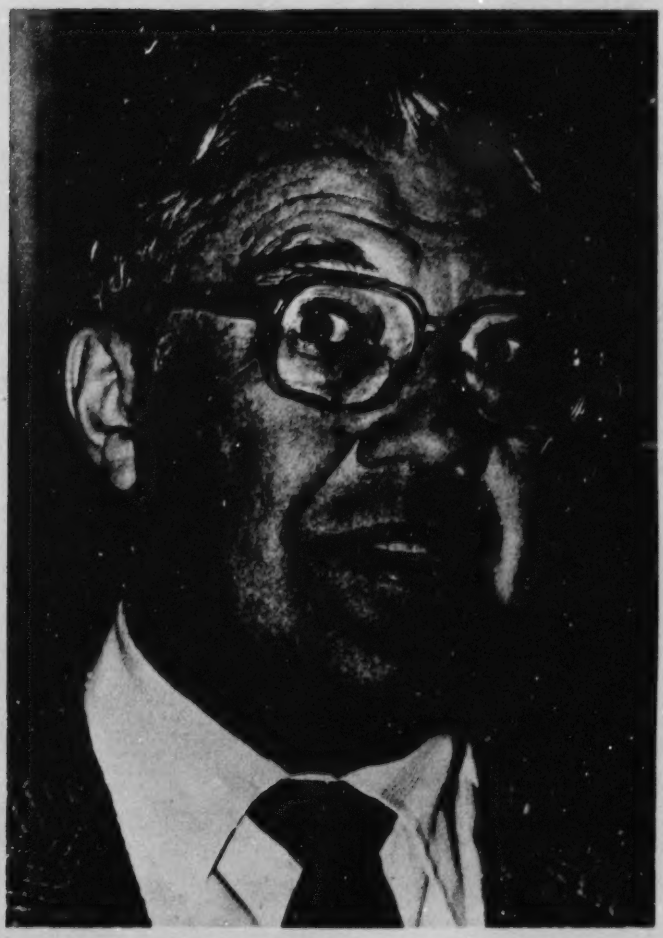
[9]From a Study done by the "Colorado Rural Housing and Development Corporation," from an interview with Attorney Richard Ginsberg of Colorado Rural Legal Services. September 1978.

[10]Ibid. Ginsberg Interview.

[11]For a detailed description of needed legislation changes see the author's article "Colorado and the Undocumented Worker," - prepared for the House and Senate subcommittees on Citizenship and International Law - available upon request.

MEETING INSERVICE NEEDS OF RURAL WYOMING SCHOOLS

by Laurence A. Walker



Cinda Roth

Wyoming is unique in that it is the ninth largest state but has the next to the smallest population of all states (332,416). Wyoming people are scattered throughout 97,914 square miles. Natural geographical features separate areas of the state. Entrance to the Big Horn Basin area, which encompasses five counties from the south must be made through the Wind River Canyon between Shoshoni and Thermopolis or by coming over the Big Horn Mountains on the east. Otherwise, one must come to this area from the north through Yellowstone Park. Western Wyoming is also isolated from the rest of the State by mountains. These geographic limitations dictate the need for different approaches to in-service work for teachers.

Societal emphasis on the growth of cities and suburbs over the past several years has tended to detract from the needs of rural and isolated areas in the United States. Educational needs are present wherever there are people, and those needs are no less important because the numbers are fewer. Most of the early schools of the west were small in size and quite isolated from other schools. The lack of adequate roads and transportation in earlier times together with the scattered population resulted in numerous small schools being established. As areas grew and transportation improved there occurred a natural tendency to combine schools in population centers and to transport pupils over longer distances. For Wyoming, the efficiency emphasis came in the 1950's and 1960's when there was a real push to close small schools by consolidation.

The 1980's have brought countervening changes in patterns of organization. The current energy shortage only adds impetus to the recognition that the small school was not bad, and had many fine features. Cross-grade grouping, individualized instruction, small classes, and open space features are now considered to be good. Those who believed that children could learn only from a teacher now recognize that children in a structured environment can learn much from one another, from aides, and parents.

Many small schools remain throughout western states, and the present energy shortage and educational philosophy seem to dictate that these should remain. If this assumption is true, then a review of the ways higher education can work to improve programs in these schools needs to be made. What particular means can be used to address the needs of teachers and administrators in these schools?

Several options of delivery and assistance exist. The Institution of Higher Education (IHE) must recognize this need and organize to assist the small school. A statewide network of faculty who live in various areas of the state can be developed. For many years, the University of Wyoming has had a plan of field representatives stationed throughout the State, usually at Community Colleges. A capable faculty person/field representative is located in a particular geographic area where he/she could be of service to the I.H.E., the teachers in preparation, and the in-service teacher. This person can identify quality opportunities for student teachers, as the placement, visitation, and follow-up of these pre-service teachers is an important function of this faculty member. Also, he/she could make an assessment of the needs of educators in the geographic area. As these needs manifest themselves, the faculty person could give assistance through a one or two day workshop for the people effected. If the in-service problem was for one teacher it might be that the I.H.E. faculty member could demonstrate, consult, or acquire the necessary resource help. The identification of teachers in the area who have worked out similar problems could be a means of helping the classroom teacher to improve instruction. If the problem is in the area of curriculum effecting several teachers, it might be that an in-service course covering a semester or year could be instituted. For this relationship to prosper, it is most important that the problems identified, or the curriculum area to be studied, truly be the concern of the faculty who are to be helped. Outside desires for curriculum improvement may work occasionally but, when the study is inspired from within, the goals are much more likely to be attained.

Another approach might be to cooperatively support a mobile Teacher Center, which could transport materials, ideas, and personnel to isolated areas for varying lengths of in-service assistance. Although the stationary Teacher Center to which the teacher must travel may be of some help, it is preferable that help be available where and when it is needed. Most important, is that those assisting be empathetic in their approach and considerate of the teacher(s) whom they are trying to assist. A Teacher Center should become a depository for the good ideas, procedures, materials, and techniques of many teachers. Furthermore, the many teachers who contribute these are often the most capable personnel for demonstrating them to their colleagues.

Another assistance plan to help isolated areas is the portal school concept. In this plan the I.H.E. seeks the aid of the State Department of Education, which helps identify capable teachers with master's degrees who have special discipline expertise. These teachers are brought to campus for a summer of preparation for instruction of a particular university course. These persons then return to their respective areas, where they team with a faculty member from the I.H.E. in offering the course. Usually the I.H.E. faculty teaches at least one-half the course the first time. After that the local teacher does most of the instruction, with the I.H.E. facutly assisting on three or four occasions. This plan helps to overcome some of the problems regarding travel costs, it gives recognition to local faculty, and it specifically develops the instruction expertise in the area.

State Departments of Education working with the local districts are best able to assist them in setting aside resources, which might enable the district to help fund the costs involved in in-service education. The members of the State Department of Education curriculum unit often know of teachers who can be the resources to solve problems identified by local districts. Their aid in developing portal school teachers has been mentioned above. Key SDE personnel can also give valuable aid in meeting the in-service needs of rural teachers.

For the isolated rural teacher, perhaps the most difficult areas of in-service are those that call on the judgment of the teacher for an action in any situation. A bad storm is beginning. Should the school be dismissed early so the children can get home; or would it be preferable to keep all the children at the school until the storm is over? Whichever decision is made, there will be problems

and criticisms. It must be remembered that the telephone does not reach all small schools. In Albany County, Wyoming, messages are frequently sent by radio on the "party line" programs of KOWB at 12 noon daily. Rural Albany County residents receive many messages through this means. Other difficult judgmental decisions fall in the areas of discipline, public relations and resource management.

A special segment of the population which requires consideration is the Native American groups on the Wind River Indian Reservation in Fremont County. This reservation is home for two tribes whose natural ways are quite different; yet, they are geographically together. Wyoming's other large racial minority, the Mexican-American, is scattered throughout Wyoming with concentrations in Worland,

DEVELOPING THE NORTH DAKOTA WHOLE STATE CATALOGUE

by Lowell Thompson

Linda Roth

Torrington, and large towns such as Rawlins, Casper and Cheyenne. The teachers who work with these minorities need special help in understanding the students' cultural backgrounds, languages and economic conditions. It is always difficult to generalize the type of assistance that is needed to help teachers understand children. We cannot generalize the culture to individuals. Just as white children are different from each other so, also, are Native American children unlike each other. The mistake of generalizing that all persons in a minority are alike must be avoided. This calls for special in-service assistance with regard to child development and psychology, as well as cultural awareness.

A treatise on special needs for the various subject areas could be developed; however, the purpose of this paper is to suggest ways of delivery to, or assistance for, the teachers in isolated schools. The children in these areas are important members of society. Their teachers should be as good as those in any other area, and the in-service for them should be meaningful and available. The plans discussed above should give some ideas for effecting this.

It has not been the purpose of this paper to explore all of the ways for delivering instructional assistance to rural areas - although, of course, several new alternatives have been developed and can be valuable when the proper equipment is available and the content to be conveyed can be adapted to them. Among the systems which seem to hold promise are, systematic communication through telephone, television, VERB (Victor Electromagnetic Remote Blackboard), electronic correspondence, and combinations of these. Of course, each of these may play some role in any of the plans listed above.

In summary, the needs of children in rural areas must be met. These can best be met through keeping teachers well prepared and up to date in materials, ideas, and methods. The three plans of assistance - I.H.E. field representatives, the mobile Teacher Center, and the portal school plan - can be utilized either separately or in combination. Children will be served well, if they have the benefit of well prepared teachers who enthusiastically teach.

EDUCATION IN THE WEST: A CLOSER LOOK

by Luan H. Ferrin

Chris Roth

When I was asked to write about the unique features of education in the West, my first impression was to examine the many logistical problems that the West can generate. Many things could be said about the distances that must be traveled by children just to get to school; or the hazards of slick roads, snowdrifts and prairie winds. It also would be easy to document the problems faced by children, who must cross swollen rivers or washed out roads early in the spring, on their way to school. One could talk about the chores that many children have to do before they come to school; the cows that must be milked, the wood that must be cut or gathered, the water which must be carried or whichever other chores that are routine here. But, rather than focus on the many problems we might face, I quickly thought of the many offsetting advantages we have.

I considered education in Utah, in our own Salt Lake Valley, and I stepped to the window of my office to look over the valley and its' beauty. Before me stretched the city of Ogden, where our site feeder system (three schools - Kindergarten through 12th grade) is located. To explain education in the West, should I describe the modern Dee Elementary School with its' top staff and educational program? Is education in our valley typified by the great concern for children displayed by Principal Milt Kendrick and the teachers who spend many hours each day in teaching, loving and inspiring children?

From the image of Dee school, a shift of eyes identifies Central Junior High School with its new program for the Middle School. Should consideration of western education be an explanation of the processes of change faced by Principal Dale Warner and his staff?

Turning my gaze, I see the majestic Ogden High School stands above the valley. (The placement of these three schools almost suggests the progression from elementary through junior high to high school.) Should I explain the programs at Ogden High School which have produced numerous Sterling Scholars and student achievers in many fields?

Once more searching the valley, I observed all of the schools built and maintained by the citizens of the community. Their dedication to education certainly could be a whole article by itself. But, somehow, wherever you go in the United States to look at schools you find similar dedicated citizens and teachers working with a locally determined curriculum.

What is it then, that makes education in the West different? As I contemplated this enigma, I stopped to realize that many things that had affected my own life and education were really things that grew out of the setting in which the schools were located. What I finally decided I'd like to consider with you, is the education that takes place outside of the classroom in the "great outdoors." This is truly what makes the West unique. As I describe the physical setting in which my education took place, each of you can transpose my impressions to your own unique setting.

Utah possesses a rich educational laboratory spanning the Alpine ecology of mountains and the lakeshore ecology of The Great Salt Lake. Many youth hike and camp in Utah, and if they are properly instructed, they can learn much from this experience. What is the curriculum of the outdoors? The responsive student can learn about geology from observing the formation of mountains as he/she hikes through the valleys and cliffs which are nearby. One can see directly the effect of wind, water, and glaciation on the mountain formations. With experienced direction you can become acquainted with the meaning of faults, alluvial fans and folds, observe the formation of soil and of drainage systems which link the mountains with our streams and rivers.

The many different varieties of rocks are ever before us, and words like quartz, shale, and conglomerate are all easily learned as you hike mountain paths. What a rich place to learn geology.

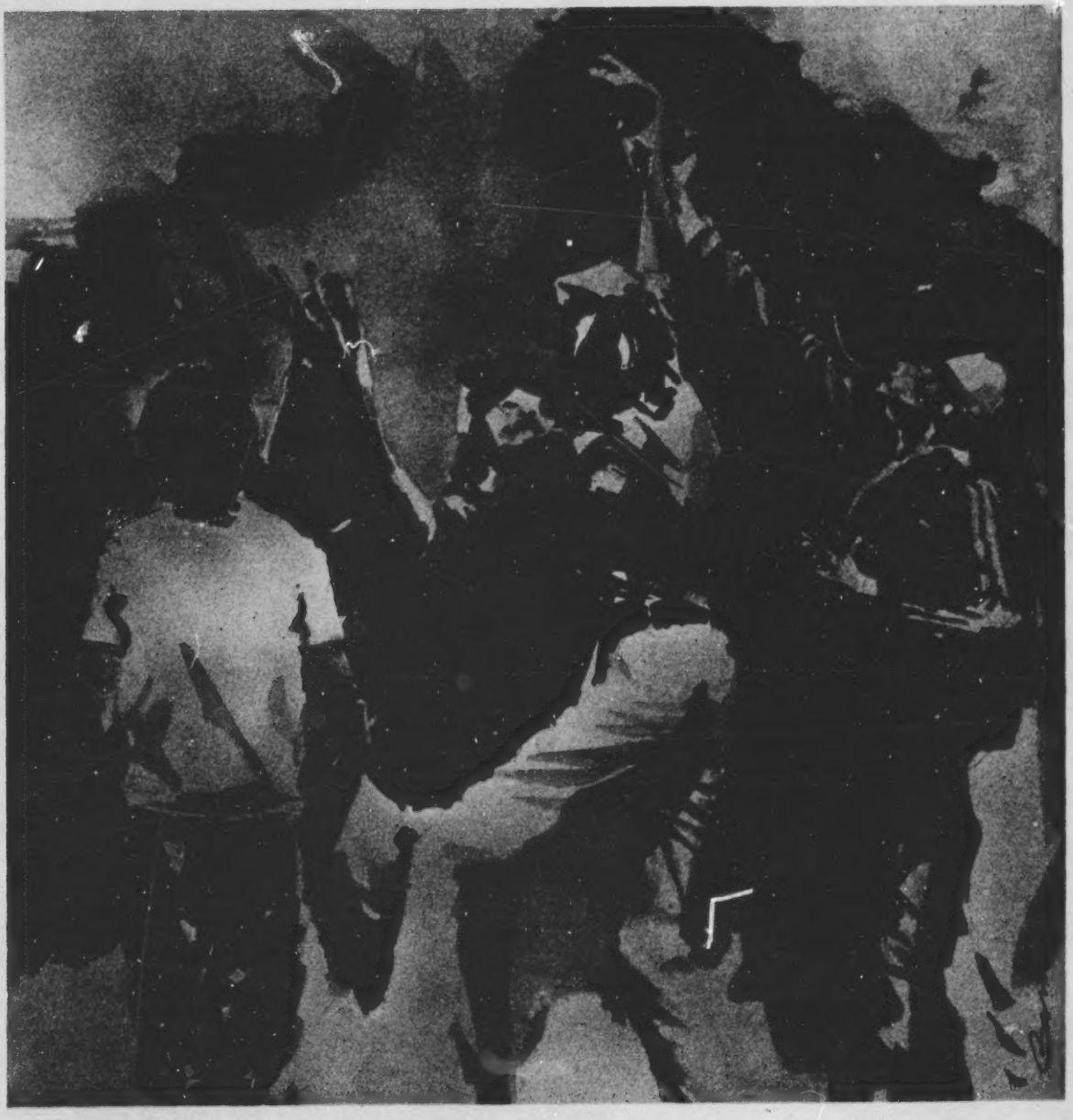
To the many lessons in geology can be added botanical encounters and lessons. What can be more fascinating than starting at the base of a mountain and observing the foliage as you progress up the mountain? As you observe the sagebrush at the valley floor, then the oakbrush of the foothills, then the pines that struggle for existence on the shallow soils of the mountain face, one stands in wonder and amazement. The hike is enriched by wildflowers of many varieties - lupine daisies, columbine and Indian Paints - all adding their beauty to the panorama of an almost endless laboratory enriching life with its beauty and utility.

A stop for a quick breath in our thin air opens up another world. Insects of many varieties are busy performing their daily tasks, while chipmunks, grey squirrels, marmots or even rattlesnakes might make an appearance to investigate the strangers that would invade their domain. A careful observer might catch a glimpse of a whitetail or mule deer cautiously watching them before bounding off through the trees.

A glance skyward reveals a redtailed hawk or golden eagle soaring high above the cliffs, searching for food or just enjoying the fresh air and sunshine. Magpies, quail and even the prairie chicken all add variety and interest to nature's learning laboratory. Upon reaching the summit of the mountain, the whole world seems to be immediately before you. Actually four states can be viewed from our highest peaks.

It is easy to stay on the mountain for long periods of time to enjoy the world busily at work below while crisp mountain breezes press against one's face. While observing the Valley stretched out before me, I let my mind slip back a hundred years or so and contemplate the scene that would have been here then. It is a small log cabin built by Miles Goodyear. As other settlers arrived, the rivers are channeled for irrigation and the barren valley became a garden. There were very few Indian tribes who inhabited the area then because it was so desolate, but bands of mountain Indians - Utes, Blackfoot, Shoshone and Piutes - traveled through. The association was generally amiable as Mormons were counseled to feed, not fight, the native inhabitants.

Exceptions occurred, of course, as when a farmer named Stewart shot Chief Terakee, a Shoshone headman. The Shoshone tribe, and warriors from other tribes, burned Stewart's home and farm, and killed Stewart. They threatened to destroy the whole settlement of Ogden. Peace was finally achieved,



but eleven forts were built for protection in the Ogden area. Names like "Mound Fort", "Wall" Avenue, and "Farrs Fort" are a part of the everyday names of Ogden.

While looking over the Valley, far to the West, shining in the sun, is the Great Salt Lake. It has been called America's Dead Sea, and is the largest body of water in the Western United States. As we start down the mountain to visit the Great Salt Lake, it becomes readily evident that at one time the Lake covered a much greater area than it does now. Terraces gouged into the mountain sides by abrasive waves show at least three distinct levels, and scientists who study the lake point out that at one time a fresh water lake as large as Lake Michigan covered much of Northern Utah and areas of Nevada and Idaho. This ancient lake was called Lake Bonneville and was very different from what remains. The present Lake is about 75 miles long by 25 miles wide and contains nearly 25% salt.

Very little will live in the alkaline solution of the present Lake. Brine shrimp which are harvested for tropical fish food are the exception. Other organisms found are blue-green algae, some protozoans, and a few bugs and flies. While there is very little life in the Lake, a great variety of life surrounds it. One of the largest bird refuges in the West is located in the swamps and marshes to the north of the Lake, where the Bear River enters. Coyotes, wild rabbits, small rodents and rattlesnakes can be found on islands of the Lake or in surrounding areas. Antelope Island is home for a herd of buffalo, and deer can also be seen in its northern areas.

Commercial mineral extraction is increasing to the point where several companies profitably extract salt, magnesium, and other metallic elements and chemicals.

I hope enough has been said to convince you of the variety of "outdoor" educational opportunities available to anyone living in Utah or, for that matter, virtually anywhere.

During the 1960's when concern for the educational deficiences of children living in low-income areas received wide public attention, surveys were conducted to determine how much of this rich environment of mountains, rivers and lakes was enjoyed by children in our low-income area schools. It was found that a high percentage had never been to the canyons, mountains or the Salt Lake. To remedy this situation, the Teacher Corps Project has sponsored several outdoor education activities to bring low-income area children in close personal contact with the rich environment around them.

Our first project was designed to give children an opportunity to participate in outdoor activities and, concurrently, to assist their parents in becoming involved in the teaching process. Lessons were taught on care and use of camping gear, outdoor cooking and winter camping. Workshops were conducted where snowshoes and reflector ovens were actually constructed. First Aid was taught, as was rock climbing safety and soil conservation. Trips to study wildlife conservation and fish management proved exciting and rewarding. As a culminating activity parents, children, interns and teachers spent a week studying the scenic wonders of Southern Utah.

The following year a new group of interns, children and parents set up a core curriculum in environment and outdoor living. Students engaged in cross country skiing, mountain climbing, camping and hiking. Once again the training was culminated with a four day trip to Capitol Reefs and Zion National Parks. For the majority of elementary school children, the experiences represented a unique opportunity never before enjoyed and a new shared experience with their parents as well.

Because of the popularity of the outdoor programs in previous years, 11th Cycle Teacher Corps interns looked for new experiences involving children and their parents. An activity-based Environmental Curriculum Program resulted. Field trip guides to exciting and educational places were developed using college specialists, teachers, interns, parents and students. The guides were designed with a map of the trip printed on front with historical, geographical, geological, and recreational information as the contents. The idea was to produce inexpensive guides that would enable parents to take their children on educational field trips and to make them knowledgeable about the area.

As a part of the Activity-Based Environmental Curriculum Program, regular curriculum was taught twice weekly in half-day sessions using field trips and "hands on" experiences to follow-up on the classroom lessons. The involvement of parents was obtained by personal home visits which were followed with orientation sessions. Several parents became part of the instructional team on the field trip, presenting lessons in areas where they had particular expertise.

To strengthen the outdoor education program, a field trip idea book was published by Teacher Corps in cooperation with The Ogden City School District. The book has been for three years a rich resource for other schools to use in planning field trips, as well as being useful to our own Project.

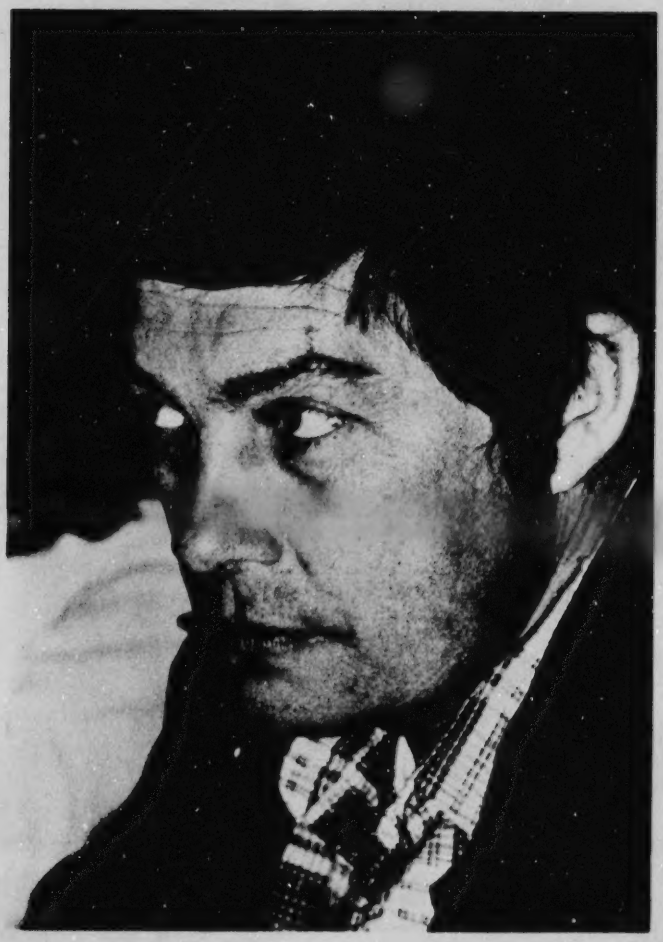
Following the precept that formal education should take place outside of the classroom as well as inside, Teacher Corps has facilitated experiences for children in a variety of cultural and recreational activities. Dancers from the ballet have come to the schools, prior to students attending a ballet performance. Artists have explained paintings prior to gallery trips; cultural groups like the Ballet Folklorio, Up With People, and Native American Dancers have all enriched the lives of the students involved. Students have watched the Globe Trotters play, have attended other ballgames, and had many opportunities to participate in a broad spectrum of recreational activities.

Well, I guess I haven't even "scratched" the surface of what I could tell you about education in the West. I haven't even mentioned the fish in our streams and lakes or the moose, elk, and antelope that few ever hear which roam our "high country". I haven't been able to capture the feeling everyone has as they lie at night and watch the moon come up over the mountain and rise ever so slowly to shine through the pines, nor have I described what its like to lie in a sleeping bag and try to count the millions of stars that seem so close in "Big Sky Country".

But, maybe I've said enough to excite your mind about the possibilities of the great outdoors as an educational laboratory, and to share some of my feelings about the real advantages of education in the West.

COLLABORATION BETWEEN BLACK HILLS STATE AND LITTLE WOUND SCHOOL FOR IMPROVED TEACHER TRAINING

by Mitch Chapel



Cinda Roth

Black Hills State College (BHSC) is a fully accredited institution which offers Elementary Education, Secondary Education, Special Education, Early Childhood Education and a variety of Secondary majors. BHSC also offers the Master's degree in Elementary Classroom Teaching.

This Teacher Corps project is in part a demonstration program funded to test new approaches, arrangements and/or new contexts for the preparation of school personnel.

In this endeavor we are linked with the Little Wound School in Kyle, South Dakota, which is a locally contracted school on the Pine Ridge Indian Reservation. A collaboratively developed needs assessment for the school indicated that we should create an alternative teacher training program, which could impact the school's isolation from traditional sources of teacher training and retraining.

We hope this article will give readers an overview of the BHSC Teacher Corps approach, and will encourage an investigation and evaluation of the delivery system we have developed by the other IHE's who are interested in creating similar systems. For those people, it should be noted that supplementary field based programs ordinarily should not be the sole offering of an institution but rather a program component that can be offered in concert with more familiar and conventional campus-based programs.

The prevailing conditions in the early 1980's give a special incentive for teacher training colleges to develop field based alternatives. Schools in isolated and rural areas still suffer a shortage of skilled school personnel. The cost of post-secondary education has escalated to a point that many students are choosing not to pursue typical four year teacher training programs. Colleges or universities cannot be blamed for rising costs or high tuition rates. Higher educational costs are only a reflection of the economy at large. However, survival for many institutions may very well depend on creating off-campus delivery systems. The BHSC Teacher Corps delivery alternative is one such system. Moreover, the off-campus alternative does not have to be kept on the back burner for rural or isolated areas; rather, it should be an option to help meet the needs of a larger potential student body. Let us also keep in mind that although there may be teacher surpluses in some places, that is not necessarily the case in each area. The opportunity to remain close to home while completing the last one to two years of a professional program and at the same time save several dollars in normal living expense is the motivation needed for many who would not otherwise become teachers. Of course, these are only a few examples of why the off-campus delivery is applauded by some. A more detailed listing could very well include everything from learning styles to teaching styles to available facilities.

In this paper, the BHSC Teacher Corps Master's level program is described; a Bachelor's program has also been developed which is quite similar to the one for a Master's degree with the difference being the level of difficulty, depth of study and areas of concentration. The Master's program is a 32 credit hour degree with a minimum of 9 hours on campus and the remaining 23 hours off campus. The program is Field Based, which means that in most cases, Teacher Corps participants receive their training while working in an elementary school. The program is also Competency Based, which means that participants progress through the program and graduate when they are able to demonstrate teaching competencies.

The steps taken by the Teacher Corps staff and the Division of Education to plan, deliver, and evaluate the training program as presented during the summer of 1979 (the beginning of the present cycle) are as follows:

1. Self-Assessment

All candidates for admittance to the Teacher Corps Program completed a self-assessment of their competencies in comparison to the twenty Teaching Competencies as listed within this article. Teacher Corps candidates utilized a pre-designed scale to determine their level of competency. Each participant was required to meet all of the Admission to Graduate Study and Admission to Candidacy for a Master's Degree requirements, as specified by Black Hills State College policy.

2. Summer Instruction

Each participant was required to attend an in-depth six-week summer session, five days a week, five hours per day. During this component of the program, the concepts/skills of Research and Writing (Intro to Graduate Study), Advanced Educational Psychology and Measurements and Evaluation were covered.

3. Individual Comprehensive Plans

During the in-depth summer session, each person who desired to continue in the degree oriented program was required to write a comprehensive learning plan that, in effect, served as their proposal and contract for a Master's Degree in Education from Black Hills State College. The Teacher Corps staff provided assistance to individual participants as needed to facilitate the writing of proposals. The assistance/instruction included the skill development necessary to complete a step-by-step planning process. Some of the major areas of concentration included the development of an educational philosophy, goals, objectives, learning activities, a rationale for their decisions, evaluation procedures, and the development of a time line for program activities. In addition, each participant was required to include in his/her plan an action-research objective to be completed during the participant's program.

4. Candidate Committees

Each degree candidate selected or had a graduate committee assigned to facilitate the accomplishment of their proposal activities. Each committee was made up of three or four members to include one person from the Black Hills State Col-

lege Division of Education, one person from the South Dakota State Division of Elementary and Secondary Education, one Black Hills State College staff member at large and, if a fourth member was included, he/she was a practitioner in an elementary school. The committees functioned to verify and approve the candidate's proposal to facilitate the accomplishment of proposal activities and objectives, and to evaluate the competencies of the degree candidate.

5. Program Delivery Planning Matrix

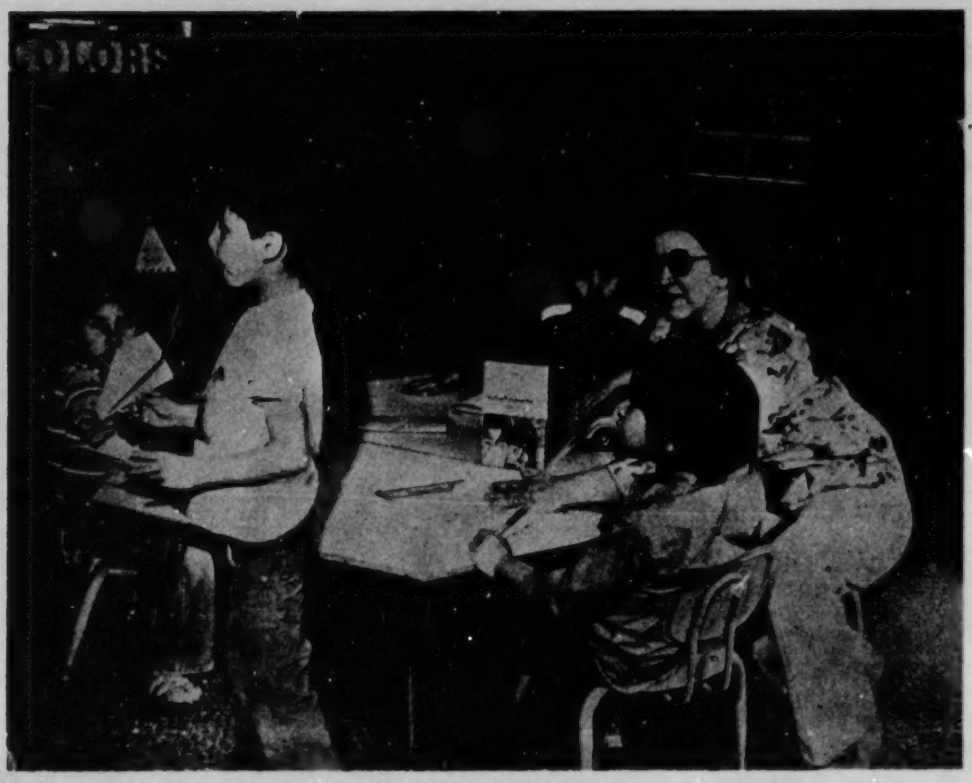
A systematic matrix for the learning needs of participants was constructed to facilitate the delivery of learning experiences. The matrix made it possible to easily determine: (1) the needs of individual participants, (2) how many participants had similar needs, and (3) who the participants were with similar needs. This information made it possible to more efficiently plan the form of the delivery of the program (e.g. If a fairly large number of participants had a similar need, a workshop might be planned. If only one or two participants had a specific need, the need might be met through individual help from a Teacher Corps staff member, by reading, or by visiting another teacher).

6. Teacher Center

Teachers were given a voice in the planning of in-service activities when a Teacher Center was initiated at the site school. Themes for each month, along with workshops and other learning experiences consistent with that theme, are planned and delivered through the Teacher Center. The monthly themes and most of the activities of the Teacher Center were planned utilizing the planning matrix and, therefore, they also facilitated individual proposal completion.

7. Program Delivery Alternatives

The major vehicle for the delivery of learning experiences to Teacher Corps participants is the Teacher Center and its scheduled activities. However, a number of other modes have also been utilized. They include: BASICS (a program of learning skills which are prerequisites to achieving any other learning outcome), Human Management Workshops (e.g., Interpersonal Communications, Leadership, Decision Making, etc.), Prentice Hall Self-Instructional Booklets (a series of twenty-six booklets designed to help participants gain competencies related to curriculum, instruction and evaluation) and



Cinda Roth

Individual Study and Learning Modules (self-instructional learning packages designed by Black Hills State College staff members). These modules frequently substitute for regular on-campus classes.

8. Competency Evaluation

Before degree candidates are given clearance for graduation, they must demonstrate the knowledge and application of competencies stated in their program (see following list). In most cases, application competencies must be demonstrated in a school setting where they are evaluated by the graduate's committee and/or site school personnel.

The selection and design of each participant's graduate committee plays an important role in determining the program's success. Each committee was carefully structured to include persons with expertise/experience in elementary classroom teaching. The graduate committee was charged with the responsibility of on-going program assessment and quality control, without complete agreement of all committee members.

If a candidate had not completed all of their prescribed study at the end of the originally specified time frame, additional time was allowed at the discretion of the graduate committee.

9. Experimental Transcript

Graduates of the Black Hills State College Competency Based/Field Based program receive transcripts that are descriptive of their learning experiences and accomplishments. The transcript includes a listing of competencies acquired and the degree of proficiency in each, rather than a listing of courses and grades. These experimental transcripts have been approved by the South Dakota Division of Elementary and Secondary Education, by the Academic Dean of Black Hills State College, and by the advisory committee to the Black Hills State College Division of Education.

The twenty competencies used at BHSC for a Master's degree are as follows:

1. Knowledge of district educational philosophy and instructional policies.
2. Knowledge of district instructional goals and objectives.
3. Knowledge of district personnel policies and performance standards.
4. Knowledge of district curriculum.
5. Knowledge of content and skills areas.
6. Knowledge of learning resources.
7. Knowledge of learning and learning processes.
8. Knowledge of students.
9. Use of assessing and diagnosing strategies.
10. Use of instructional planning strategies.
11. Use of instructional strategies.
12. Use of management services.
13. Use of supervision strategies.
14. Use of assessing/evaluating strategies.
15. Use of communication strategies.
16. Use of problem solving/decision-making strategies.
17. Use of human relations strategies.
18. Community involvement.
19. Understanding and responsiveness to cultural pluralism.
20. Special education needs of students.

Inevitably, because this is a new program, there are those who will question whether it is invalid and watered-down. A part of this questioning derives from a desire to compare competencies to courses. However, comparing courses to competencies is somewhat similar to comparing two teachers, teaching English 101. Each may use a different approach but end up in the same place with similar goals reached. On the other hand, one teacher may be much more effective and the end result noticeably different. Moreover, English 101 may include different goals at "Institution A" in comparison to "Institution B." The above information, when viewed in an analytic manner, appears to suggest a difficulty in comparing one method to another or one individual to another for the sole purpose of determining superiority of A over B or X over Y. The information does suggest, however, different approaches or different delivery systems can very well share similar high quality. Naturally, it could also be inferred that individuals involved, expertise available and quality control could very well cause a variety of approaches and/or deliveries to render noticeably different results. The same logic must be applied to a discussion of competencies and/or courses. The key element within the BHSC Teacher Corps approach is that of different (but equal) delivery systems.

The competency/proposal driven approach has some conspicuous strengths, while at the same time it has other inherent concerns. - The strengths include:

1. Meaningful organization and direction: By using the comprehensive planning approach to determine goals, objectives and activities, the competency proposal becomes an Individualized Educational Plan at the graduate level.

2. Personalization: Through the proposal development, the individual, in conjunction with a graduate committee, must do a very in-depth needs assessment. The needs assessment, in turn, indicates strengths and weaknesses allowing the candidate to concentrate more energies on areas of need.

3. Field Based: Although not necessary, the competency/proposal approach has been used basically as a field, off-campus delivery alternative. Considering the high cost of tuition, the shortage of jobs, the alternative delivery system allows a participant to remain employed thereby permitting many with opportunities to continue their education. Many of these same participants, who are uniquely qualified but economically disadvantaged, would not or could not continue their formal studies without this delivery option.

4. On-the-job-training aspect: Most educational research indicates that hands-on internships are superior learning experiences. The competency delivery alternative should be viewed as an advanced level internship, which allows the individual to actively practice theories learned concretely rather than passively practiced through abstract discussion.

The concerns then include:

1. Time/Task Difficulty: A major concern of participants within the program is that of the amount of work and time required for it, which derives from its active nature. All individuals involved in the competency/proposal delivery indicate they think this delivery approach requires considerably more work than their traditional classroom experiences; however, they feel they are gaining much more from their field experiences than they have from more traditional classroom experiences, and consequently feel confident the extra work was worthwhile in professional terms.

2. Committee Structure: The reliance on committee structures for delivery of this program necessitates additional work for committee members. They must spend additional time and thought in developing and delivering Individualized Education Plans for each person in the program. Concurrent with this work is the responsibility each committee member has for the success of each individual using the program. Thus, committee membership places teacher trainees in high risk situations more than does traditional training programs.

Overall, the field based program we have developed seems to have met all of the quality standards of the college, while significantly making the program more personal, comprehensive and relevant for Master's Degree students. We have additionally done this in a manner which, in effect, opens the doors of the college to students who would not otherwise be served.

A recent issue of the Network Prospector pointed out some of the problems associated with education in the less populated areas of the Rocky Mountain Teacher Corps Network. These same problems (i.e. low population density, rugged terrain, limited tax base and limited cultural exchange) were also apparent to a group of North Dakota educators who came together in the fall of 1975 to begin the task of developing a curriculum for the teaching of "North Dakota Studies." Their efforts to provide a richer learning experience for both students and teachers, in spite of the obvious problems or challenges, is the focus of this paper.

As the statewide committee came together to begin to do some informal curricular needs assessment, it became apparent that teachers needed and wanted - (1) more current and more flexible basal materials and (2) more supplementary materials such as films, books, resources people, field trip guides, and easier access to these materials. While the latter request seemed challenging but manageable, the former seemed downright simple. We would simply invite several publishers to present a prospectus for a basal text and select the one that came closest to meeting our needs. Needless to say, it turned out to be not so simple. We were not able to find a publisher who had any interest at all in the invitation. The market was just too small. A solution was found, however; instead of producing one expensive basal text, we decided to produce a number of short inexpensive topical booklets. Producing booklets, besides being less expensive, gave teachers more of the flexibility they had requested. Also, instead of hiring expensive professional writers, we would ask classroom teachers who had particularly strong personal interests in specific aspects of North Dakota history to write the various booklets.

Information on the project was sent to classroom teachers through various state professional periodicals; thereafter, a fairly large number of teachers responded with a prospectus for specific topics. A final selection of authors was made and workshops scheduled for them. The workshops, organized to support the teachers in their writings, were conducted by members of the State Historical Association, the State Library Commission and the Department of Public Instruction. Several of the workshops utilized professional writers' talents.

Eventually, twenty booklets were written, field tested, revised, printed in quantity and distributed to teachers throughout the state in conjunction with a series of regional workshops. What had been seen as a major obstacle had been faced as a challenge and had yielded unexpected dividends. Serendipitously, students had access to materials containing good current information about the state, and teachers had more information than they could possibly "cover" in one year. As a result, some of the teachers read from their historical fiction booklets as a part of opening exercises for the year; while others created interest centers around some of the booklets and still others set up North Dakota Studies libraries in their classrooms and integrated the study of North Dakota into their Language Arts classes.

Besides significantly enriching the materials available to students, the process of writing the booklets additionally enriched the professional life of many teachers. Most of the teachers who wrote booklets had not seen themselves as writers. With some help, however, the teachers produced excellent materials and experienced a "learner process" renewal as they did research and writing on individual topics. Further renewal extended to their colleagues who became interested in the work. The benefits also spilled over into the ranks of the North Dakota Council for the Social Studies through a series of workshops and seminars presented at statewide meetings.

A second project growing out of the teachers' concern for enriching the North Dakota Studies effort focused on the challenge of providing a richer learning experience for students in smaller more isolated areas. Students in the larger cities of the state did have access to many supplementary materials: museums, historical associations, resource people and field trip sites. Students in smaller more isolated areas of the state, however, had little beyond the twenty booklets produced in the previously mentioned project.

For the second project, a decision was made to attempt to identify as many as possible of the supplementary materials available within the state and to bring these materials together in an annotated publication to be titled, "The Whole State Catalog."

Initially, a questionnaire was sent out to several hundred North Dakota Studies teachers asking them to list the books, maps, films, resource people, pamphlets, brochures, etc. that they either used or knew of. A smaller sample of teachers was interviewed in their classrooms and a booth was also set up at the State Teacher's Convention. The people manning this booth conducted a random poll of teachers as they passed by. From these three resources (surveys, interviews, polling), an outline for The Whole State Catalog began to emerge. The next step in the process was to hire a general editor who could begin to identify people willing to write various sections of the catalog. Several professional writers were hired for this phase of the project. The editor of the North Dakota History Journal selected 100 books dealing with North Dakota history and wrote short reviews for each. The Field Liaison Office for the State Historical Society surveyed all of the public and private museums of North Dakota and wrote a brief summary of each. A former state legislator and journalist identified all of the periodicals published within the state that dealt with North Dakota's agriculture, business, industry, energy, government, and tourism, etc. Short "thumbnail sketches" were then written for each of these periodicals. A cartographer examined many of the maps available and selected about a dozen to review in some detail in The Whole State Catalog.* Colleges, universities and governmental agencies were contacted by a retired social studies teacher who wrote brief descriptions of the materials available from these sources. Other writers contributed sections on field trip sites, audiovisual materials, games and simulations, and organizations and institutions.

Another major section of The Whole State Catalog was devoted to resource people. This section contained the names, addresses and topics of people willing to make presentations to classes and other educational groups. A number of resource people had been identified through the surveys and interviews conducted earlier and a small number were also identified through some existing directories, such

as the Highway Department Speakers Bureau and the County Extension's Directory of Talented People.

Cinda Roth

In addition, four teachers, one in each section of the state, were given a small grant to identify resource people in their area. Altogether, over 100 different topics and several hundred resource people were identified and listed in the catalog. The topics included such things as Genealogy, Wildlife, Quilting, Solar Energy, Securities Fraud, Welfare Programs, Ukranian Culture and Student Loans. This proved to be one of the most useful sections of the catalog.

The Whole State Catalog culminated in a 180 page document organized into ten chapters. The catalog was cross-indexed by subject and county, and a local printer produced it in quantity. It represents the first complete listing of supplementary materials available for the teaching of North Dakota Studies and is possibly the only document of its kind in any of the states.**

Catalogues were distributed to schools throughout the state and, while its usefulness to classroom teachers is yet to be fully determined, the initial reception by teachers appears to be positive. The teachers' seemingly warm reception to the catalog is probably due to several factors. First of all, and maybe most importantly, several hundred teachers contributed to the catalog in the initial identification of available materials. These teachers knew the catalog was in progress, knew they had had a hand in producing it, shared this knowledge with their colleagues and looked forward to its successful completion.

Secondly, the catalog is a "slick" publication. It's not the typical "dittoed - stapled - hard to read - easy to lose" publication, It is bound, with a soft shellac cover, uses bold black type throughout and contains numerous illustrations. The original charcoal sketches which introduce each chapter also contribute significantly to the overall attractiveness of the catalog.***

A third attribute that accounts for the usefulness of the catalog is the cross-indexing. The county index

lists the specific pages that contain information about each of the 52 counties in the state. The subject index additionally sublists all of the entries by medium (i.e., films, books, resource people, and field trip sites). A teacher searching for a specific topic need only refer to the subject index. A teacher looking for a film, book, or a resource person, need only refer to that particular section.

Overall, The Whole State Catalog appears to be a useful supplement to the project study booklets and would seem to have some potential for enriching learning experiences in smaller communities. The process by which the catalog and the project study booklets were produced, however, may be more important than the product itself. Having taught for some 20 years at every level of education from Elementary to College, I have sat on my share of curriculum revision committees and have been presented with really more than my share of nicely "scoped and sequenced" curriculums.

This project was unique in that it did not have very many "sitters." It did have lots and lots of "doers." Additionally, the committee was not made up of administrators and curriculum specialists with a "token" teacher thrown in at the last minute; numerous teachers served on the committee, and ample opportunities for teachers throughout the state to contribute to the publication were provided.

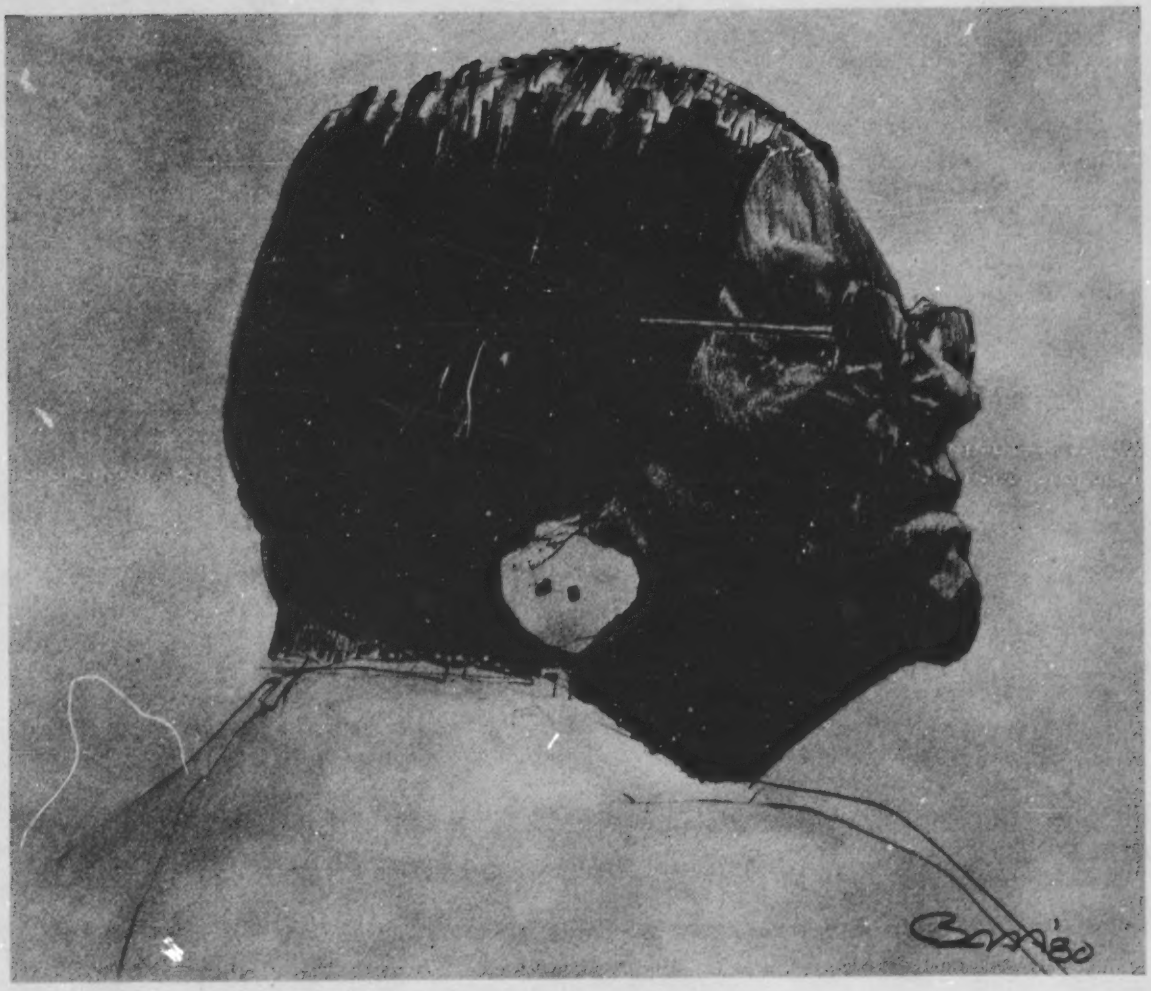
The project was also unique in avoiding the aforementioned "scope and sequence syndrome." This syndrome assumes that classroom teachers need to be told exactly what it is that they need to teach (the scope) and the exact sequence in which it should be taught (the sequence). Inevitably, this is a result of a tendency to focus attention on exactly the wrong part of the curriculum...specifically the content, instead of the human interaction between kids (students for you purists) and the teacher. In my opinion, it is hard to imagine anything more damaging.

Instead of falling prey to the scope and sequence curriculum syndrome, this committee developed what could be called a Naive curriculum approach. Teachers simply asked what they needed. When we thought we understood what they were saying, we went back and asked if any of them could help produce the product. As it turned out, a lot of them were not only able but also willing to help. The result was a catalog teachers could use to identify literally thousands of resources including people, films, books, magazines, field trip sites, games, etc., and 20 booklets dealing broadly with the state of North Dakota.

Was this curriculum process superior to a more traditional process of developing a new scope and sequence for the teaching of North Dakota Studies? My opinion is that it clearly was superior - having now had some experience with this project, which asked, "what is it you need..." instead of asking "what do students need to know and in what order should it be taught." Also, having had experience with another alternative curriculum development process which began by asking each social studies teacher in one school "If there were not a prescribed curriculum, what is it you personally would like to teach in social studies?", these two experiences now make me feel qualified to state my first law of curriculum development....

Thompson's first law of curriculum development:

"If you allow a curriculum committee to focus on scope and sequence, they will."



Does the type of process used in North Dakota merit consideration on a broader scale by the Teacher Corps Network? Again, because of the recent experience... my opinion endorses a resounding yes! While I'm not sure I could generate a "law" in support of my opinion, I do have a suggestion or two.

First of all, even though Teacher Corps Networks will soon cease to exist as a formal entity, starting on a catalog might create a legacy upon which more informal associations could be continued. Viewed in this way, a catalog could keep us all working together on a common task. While there is merit in diversity, there is also strength in commonality. Our diversity need not be devisive though to some extent it probably is now. Our strength in terms of a common purpose is well recognized but may be enhanced by focusing some of our energies on a narrower, well defined task such as the publication of a "whole catalog."

My second suggestion would be that individuals submit to the editor of the Network Prospector suggestions about things that could be listed in a Whole Network Catalog. My own list, while not totally original and possibly not extremely well considered, would include:

I. Places: The schools, the towns, the colleges and universities that make up the Network...pictures, descriptions, anecdotes, etc. of these places...informative but entertaining.

II. Brief Bio's...of every "Man-child" in the Network...starting with the newest teacher and working down to the oldest college president...with pictures, of course.

III. Different Strokes...different ways to teach Math or Social Studies or Respect or whatever. Short narrative accounts along with persons to contact for more information.

IV. Research Interests...buyers and sellers; applied or pure; classroom or laboratory; teachers or professors; lay and professional.

V. Resource People...Network people, community people, people from other fields, insiders, outsiders...no pictures!

VI. Sources of Sources...Places to get information, summaries, lists, bibliographies, etc.

VII. Teacher Education...

VIII. A Basic Teacher Corps Philosophy and Assumptions Supporting the Philosophy

IX. Other?

Having promised but two suggestions, I will restrain myself from making more. Would though that I be permitted an observation, as a not too well informed newcomer to Teacher Corps, it seems to me there might in fact be a lot of bright new faces within the Network. I'm just a bit concerned that their light has not been allowed to shine, Would a Whole Network Catalog bring a freshness to the Teacher Corps, by identifying new perspectives and restating or reexamining old ones? I think so!

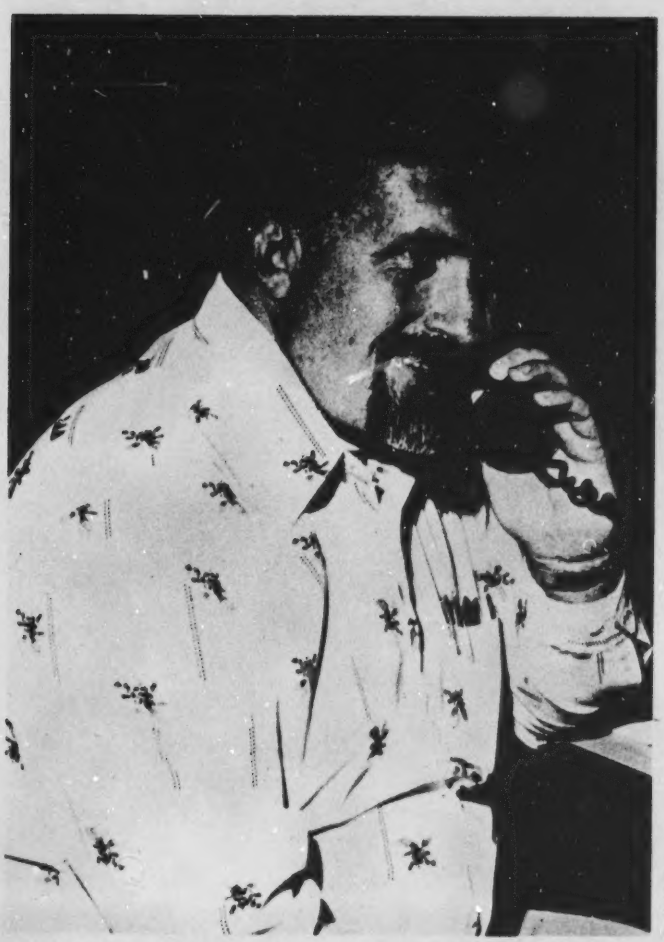
* *The Whole State Catalog for North Dakota: Resources for Teaching North Dakota Studies, 1978. The catalog was published under the auspices of the North Dakota State Department of Public Instruction, Howard Snortland, Superintendent, Bismarck, North Dakota.*

** *Footnote...Several other states were contacted early in the project. All of the states contacted had some listing of materials but they typically contained only books and films and consisted of a few pages of xerox copy.*

*** *Deb Erickson, current President of the North Dakota Art Teachers Association sketched the North Dakota scenes.*

A NATIVE AMERICAN ENVIRONMENTAL EDUCATION APPROACH FOR MONTANA AND WYOMING

by Donald F. Darling



Chris Roth

INTRODUCTION

A discussion combining the present situation for Native Americans and environmental education must begin with the ceremonies and traditions of Indians and the reservations which they occupy. During the "pre-history period" of the white man in North America, Indian people lived in coexistence with the land and natural resources of their territories. Coexistence there included a deep reverence and respect for Mother Earth, the "Great Spirit," and the spirits which occupied the plants and animals of the environment. The harmony of this relationship is found in the ceremonies and rituals which they used to placate the spirits when "wrongs" were done or when use and consumption of plants and animals necessitated a destruction of life.[6]

Anthropological research seems to indicate that Indians settled North America as a result of several migrations to the continent from Asia. Definite locations for the origin of these migrations are not known, but the intrarelatedness of the Indian people is well substantiated. Thus, the Indians of Montana, whether they were original inhabitants or were pushed westward by the white man as he infringed upon other home territories, have a much higher degree of intrarelatedness than the white man with which they competed. Competition and wars between tribes are partial historical fact; predominantly tribal contact was peaceful or resulted in only minor problems. Each tribe maintained the social and cultural identities of their particular organization, including language, and each had a long history of spoken legend. As separate tribes, each tribe maintained a basically nomadic existence within their claimed territory, using the animals and plants for food and other necessities of life. Other Indian tribes may haved used the settled manner of life, including farming, but the Western Indians exhibited the true nomadic style of hunting and inhabiting an area until its resources were temporarily exhausted. This caused a movement of the particular group of Indians to new locations for the food they needed. Certain locations were favorite seasonal gathering places for particular tribes or groups, due to the food available there or the ceremonial significance of that special location.

Native Americans were excellent hunters and became very proficient in their pursuit of game even before the introduction of the white man's aids - horses and guns. Recent examinations of Indian hunting methods by anthropologists have concluded that they were responsible for the continental extinction of as many as ten major "mega" species of mammals, including the Wooly Mammoth, the Big or Cave Bear, the Short Faced Bear, and the Musk Ox. This theory is based upon the introduction and increased efficiency of clovis point stone tools, arrows, spears, lances, etc. A more recent example of this proficiency, spanning the prehistoric and historic past, centers around the buffalo jump or "pishkin" technique of driving buffalo over a cliff or into a ravine where the injured animal could be easily slaughtered and used for food. Once the horse and rifle were introduced to the Indian, their tactics changed and individual animals were hunted in turn. The near extinction of buffalos in recent times is credited to the white man in his search of meat and hides, and to exclude a vital food supply from warlike Indians.

Indians have been called, by some, the first conservationists. An examination of this claim usually yields the conclusion that Indians were not conservationists, but instead used survival tactics in their acquisition of food and based their nomadic activities on availability of game, not the conservation of it. Thus a tribe of Indians, or more likely a hunting band of the tribe, stayed in one area long enough to bring the available food supply to a level where easy procurement was difficult. The band moved on, leaving a "seed crop" remaining, since continued hunting was not worth the effort. This remainder often was enough to build up the population again over a period of time until the next pulse of Indian population moved through the area. The result may have been a conservation situation, but not by design or purpose.

THE PRESENT SITUATION

At present a majority of the Native Americans in Montana and Wyoming live within the boundaries of eight reservations: the Blackfeet, Crow, Flathead, Fort Belknap, Fort Peck, Northern Cheyenne, Rocky Boys in Montana, and the Wind River in Wyoming. They came to these reservations after a sometimes hostile but always inevitable long history of association with the white man, who constricted them into smaller and smaller parts of their former range or pushed them entirely out of their historic area into new and strange lands. Farming and other alien customs were imposed on them as alternatives to their original nomadic life.

A general description of the eight reservations is contained in the following characteristics. The land is dry and semiarid with minimal direct rainfall for agriculture. Ranching and farming use large areas for cattle and crop production but employ a minimal number of Indians. Industry is absent from most reservations where 40 to 60 percent of the population is unemployed. Housing is a severe problem due to low income. Many civic improvements, common elsewhere, are absent. The climate is usually harsh with extremes of temperature and wind.

Some Native American authors characterized their historical transformation as an attempt to deny their own culture and to officially treat them as deprived in another unwanted culture. In their view, the federal government's policies toward Indians have converted them from independence, as was true in early history, to a here-and-now orientation. The nation's dominant white culture is suspicious or contemptuous of the culture, religion, and traditions of Indians and continues to emphasize and promote white culture as more appropriate for the "deprived" Indian. Only primitive attempts have been made to educate Indians in Indian ways through appropriate cultural methodology.[4]

Reservations are generally sparsely populated and have little environmental degradation. The Indian people treasure this situation and are resisting pressures which would cause air and water pollution. Recent laws, such as the Indian Self-Determination and Education Act (PL93-638), have enabled the reservations to more fully govern themselves without federal intervention, and this has resulted in a revitalization of self-determination and control -

a very positive direction which has begun to show results in increased pride, hope, and direction for the future.[5]

EXISTING NATURAL RESOURCES

The natural resources on Indian reservations in Montana fall into four major categories: water; minerals, including oil, natural gas, and large amounts of coal; timber and wood products; and arable land. Land resources within the boundaries of the eight reservations total 10,600,000 acres; with the major acreages being used for grazing (72%), farming (11.5%), and timber (15%). Large tracts of land devoted to agricultural purposes have great potential for the future, not only in their present uses but also for the mineral wealth which underlies them.

At present the environmental pressures on reservations are directed toward the natural resources, water and energy. Potential water rights and usage are presently under federal litigation for Montana due to tremendous increases in political pressures for water utilization by Indians and others. Energy utilization is currently a high priority in Southern Montana on the Northern Cheyenne and Crow Reservations. Tremendous coal potential is available for development if proper utilization can be pursued in light of environmental considerations, including the development's impact on water quality.

Continuing political pressure surrounding the environment of the reservations is ongoing and increasing. The reservations' resources are in great need by the general public. In spite of the problems of each reservation, residents continue to resist pressures which can cause degradation. Increased pressures in the future will cause continued conflict in light of the nation's population growth and increased demand. The major immediate threats include: demand for open pit mining with air pollution resulting when the coal is used for electrical generation; demand for the water, presently under treaty rights to the Indians, for coal slurry purposes, for irrigation, and for other industrial purposes; and the continuing demand for land for corporate ranching and farming.[6]

THE U.S. FISH AND WILDLIFE SERVICE AND INDIAN ENVIRONMENTAL EDUCATION

On July 11, 1977, Assistant Secretary of the Interior, Robert F. Herbst stated that he "feels environmental education is the most important thing we can do in conservation." He also stated: "There is no long-term effort more beneficial for fish and wild life resources than the education of our vast constituency about nature."[1]

From the onset, the mission of this environmental education program has been to utilize a strong environmental component as an integral part of all service management efforts. This has resulted in the Fish and Wildlife Service being better able to achieve its mission of enhancing fish, wildlife and wildlands benefits for all people.

President Carter said, in his proclamation of April 12, 1977, announcing Earth Week: "Since the beginning of this decade, we have begun to recognize that our planet's capacity for satisfying the needs of mankind has limits. We have begun to see that we are its stewards, not its masters. Human activities, even well-intended ones, can inflict deep and lasting damage to the earth, air, water, and living plants and animals on which we depend. Protection of the environment is a debt we owe to ourselves and to those who follow us." The President concluded his statement by saying, "In particular, I ask all educators to consider introducing an ecological perspective into <u>every</u> scholastic or academic discipline to protect the health of our planet."

THE CONTEXT FOR NATIVE AMERICAN ENVIRONMENTAL EDUCATION

Since this environmental education program deals specifically with Native Americans, a discussion of the legislative mandates for environmental education will be followed by a description of the Indian Self-Determination and Education Act.

The U.S. Fish and Wildlife Service has derived its authority for environmental education from the following three acts of Congress: (A) The Fish and Wildlife Act of 1956, which states, in part, that the Secretary shall participate in "...the conduct of educational and extension services relative to commercial and sport fishing, and wildlife matters...;" (B) The Recreational Use of Conservation Areas Act of 1972, which broadly permits and encourages agencies to become involved in E.E. activities.

Given the above mandates, the goals of the U.S. Fish and Wildlife Service in an environmental education effort can best be stated as, (1) to foster clear awareness of, and concern about economic, social, political, cultural, historical, moral, esthetic, and ecological inter-dependence of the natural environment; (2) to provide opportunities to acquire the knowledge, skills, values, attitudes, commitments, and convictions needed to protect and improve the relationship between the quality of life and the quality of the environment; (3) to provide an understanding of ecosystems and energy flow in the environment; (4) to help create new patterns of behavior for individuals, groups, and society as a whole, towards our fish and wildlife resources, wildlands, and the total environment; (5) to insure that the unique expertise and resources of all officers in the Billings Area Office, as well as the entire U.S. Fish and Wildlife Service, are used for education efforts and coordinated with local, state, national, and international organizations concerned with the promotion of environmental education.

With the passage of the Indian Self-Determination and Education Act of 1975 (PL93-638), the U.S. Fish and Wildlife Service has been given the vehicle for promoting Natural Resource Career Options among the Native Americans residing in Montana and Wyoming. The main goal of such an intent is to provide Native Americans, through self-determination, the capabilities of better managing the natural resources that exist within their land-base boundaries.

INDIAN EDUCATION TODAY

Before a specific description of this environmental education program is given, it is necessary to first critically analyze some of the problems facing Native American education.

The most important misconception to bring to light concerns the lower level of Indian academic achievement in school. Contrary to popular and narrow belief, this is not due to a lack of educational potential. "Culture free" evidence indicates that achievement on tests, not dependent on English reading skills, show Indian students with at least the same educational potential as non-Indian students.[2]

Outside of the obvious need for the development of adequate reading skills, the following culturally raised factors are contributing reasons for the low academic achievement of Indian students: (1) academic mis-retardation which is associated with over-age students; (2) high dropout rates (approximately 60%) which continue family patterns of education; (3) prejudice which can manifest itself in many forms, both blatant and subtle. More often, the kind of prejudice encountered takes the more subtle form of indifference or intolerance to the cultural backgrounds of Indian children; (4) withdrawal and alienation from the educational process brought about by the false "cultural deprivation" of the child by their parents and community as perceived by "educators"; (5) lack of command of the English language; (6) cultural shock brought about by customs, attitudes, and value systems which are often different from those Indian children enter school with; (7) inadequacies of standard curriculum materials for use in schools where Indian students attend (the curricula for many schools have little or no relation to the backgrounds and lifestyles of large numbers of Indian students); (8) textbooks for use in typical classrooms have little relevancy to the environment of many Indian communities; (9) the typical American school curricula also tends to stress values which are less important in Indian communities (i.e., aggressiveness and competition are not a part of the traditional Indian educational system to the degree that they are in many non-Indian educational systems); (10) courses which rarely reflect the positive impact of Indian societies on the American nation (e.g., medicine, agriculture, architecture, government, and science); (11) excessively high turnover rate for faculty and administrators in "Indian" schools (Avg - 40%); (12) the lack of cultural competency, awareness, and sensitivity teachers possess in their attempts to teach Indian students; (13) the perpetuation of a vicious circle of low expectations and low standards of success afforded Indian students; (14) the paternalistic attitude of many non-Indian people which has done much to destroy the self-confidence of Indian people over a long period of time. This has done much in taking away the initiative of Indian communities to develop the experience and ability necessary to control or significantly influence the education of their children; and (15) peer group pressure. In many cases, the group with which an Indian child associates is experiencing the same academic frustration. Therefore, any extraordinary success in school may be rewarded by disapproval or ostracism by an individual's peer group.[4&7]

In an overall sense, perhaps the most outstanding factor in the lack of educational success of many Indian students may be the questionable relevance of contemporary formal education to Indian people and Indian communities.

As for higher education, one of the greatest concerns is the phenomenally high dropout rate. Estimates of dropout in higher education (college), for Indian students, range from a low of 79% to a high of 93%.[3]

A summary of material obtained through interviews with Indian students indicates the following list of dropout causes stated by the students themselves: (1) the nature and quality of previous education; (2) personal finances; (3) institutional racism, coupled with experiences of personal discrimination;

(4) the lack of persuasive role models available to the student; and (5) the cultural differences between the student and the institution.[6]

All of these concerns in Indian education are interrelated and complex. Any approach that hopes to be successful must be aware of all influencing factors. If the educational process is to have relevance to Indian people, there is a need for comprehensive, multidisciplinary programs.

A RELEVANT "INDIAN" ENVIRONMENTAL EDUCATION

Our multidisciplinary education program derives from the theory that the fragmentation of knowledge, into separate disciplines of knowing, has resulted in an inability to perceive the holistic reality of the environment. This, in turn, has resulted in many ill-advised decisions concerning the dynamic relationship between the quality of life and the quality of the environment.

The multidisciplinary organization advocates a union of school to life itself. Schooling must support an active relationship with the natural and man-made environment.

From the standpoint of students, the great waste in school comes from their inability to utilize experiences they get outside of school in any complete and free way within the school itself; while, on the other hand, they are unable to apply in daily life what they have learned in school.

An attempt will be made through this E.E. program to reunite the school with life. Instead of simply putting aside their ideas, interests, and activities that predominate in the students' homes and communities, students will be able to capitalize on their experiences through an intensified awareness of and appreciation for their immediate environment. The main stimulus for providing an active participation in environmental education will progress from a totally local basis to a gradual analysis of state, national, and international environmental conditions and issues.

Through an infusion of environmental education concepts, as we know them today, in all disciplines relevancy can be introduced into the students' curriculum. By utilizing skills presently taught in each of the discipline areas, relevancy will be provided through learning about the real environment each student experiences.

Another significant educational goal, that will be sought, will be the development of an ability to transfer knowledge/skills learned in one discipline (e.g., Math) to all other disciplines encountered.

By utilizing environmental education as an integrating theme, it is anticipated that: (1) students will take a more active role in the learning process; (2) relevancy will be injected in the teaching-learning condition; (3) students will become interested and concerned about learning; and (4) there will be a gradual rise in the academic achievement of Indian students.

Living in harmony with nature, preserving and conserving it, has become a contemporary preoccupation for many American citizens. They search diligently for some form of behavior that will preserve what is left of the natural beauty of the continent and clean up the overwhelming waste products of a rampant technological society.

Secondly, we will be able to take advantage of other educators' previous work in Environmental Education. Technical curriculum materials which have already been developed are excellent and very extensive. Therefore, existing curricula in environmental education will be provided to all eight reservations through this program.

Traditional Indian lifestyles and beliefs were/are extremely attuned to man's living in balance with his natural environment. It is a basic belief of this program that the use of the students' "Indianness" is compatible with and the basis for environmentally "educating" them. This, then, leads us to the third point in the approach advocated through this program. The involvement of local Indian people, tribal historians, and cultural heritage departments at each of the eight reservations will be called upon for assistance and guidance at every step of the developmental process. It is from this process that relevancy and Indian dignity will be actualized.

The last part of the approach utilized involves the dissemination of environmental education concepts for the development of program objectives. A total of 341 viable concepts have been compiled for the program. Major content areas can be identified as follows: (1) General Concepts; (2) Air Pollution; (3) Balance in Nature; (4) Conservation of Forests and Timbers; (5) Conservation of Human Resources; (6) Noise Pollution; (7) Conservation of Land Resources; (8) Rural U.S. Urban Problems; (9) Wise Use of Mining and Minerals; (10) Conservation of Water Resources; (11) Preservation of Wildlife; (12) Population; (13) Energy; (14) Solid Waste Pollution; (15) Economics and Technology; (16) Environmental Ethics; (17) Soil Conservation; (18) Politics and Ecology; and (19) Cultural Contents.

Some of the Environmental Education objectives for Native Americans are: (1) to reaffirm the spiritual relationship between the Indian and his environment by introducing the student to his cultural and natural environment, past and present, and by helping him to realize that he is a very important part of it; (2) to equip the student to be a responsible member of the tribe, nation and world which are shaping him and which he is shaping; (3) to promote an understanding of how man is using and misusing his resources; and (4) to relate traditional lifestyles of Indian peoples that reflect a close and balanced relationship to natural surroundings to the self-concept of the Indian student.

The four levels of "environmental" development can best be described as: (1) the purely affective development, whereby sensitivity, awareness, appreciation, and concern for the "TOTAL" environment is developed; (2) a gradual development of a framework through which students, either as individuals or as groups, visualize how they can affect the relationship between the quality of life and the quality of the environment; (3) the development of knowledge/skills necessary to investigate the environment and

the environmental problems and issues of today and those likely to come in the near future. Here, extensive utilization of problem solving techniques and values clarification will be introduced. The object will be to develop the skills necessary to identify environmental problems; collect, organize and analyze data; generate alternative solutions; evaluate and select appropriate alternative solutions; and develop, implement and evaluate a plan of action; and (4) the development of knowledge/skills necessary to take positive environmental action in maintaining an appropriate level of quality between life and the environment.

SUMMARY

The educational benefits which this program will attempt to develop can be listed as follows:

1. Through utilization of the Indian Self-Determination and Education Act (PL93-638), the U.S. Fish and Wildlife Service hope to promote and advance natural resource career options to the Native Americans throughout Montana and Wyoming so that they can better manage their land base.

2. Utilization of a multidisciplinary environmental education to "revitalize" the deep reverence and respect traditionally held by Native Americans.

3. Utilization of an Environmental Education "flavor" to help make education more relevant and interesting to Native Americans and, therefore, help them obtain improved academic credentials.

4. Utilization of environmental education to advance dignity and self-esteem for Native Americans as a very significant and important faction of our society.

Researched in collaboration with Thomas Cortese, Environmental Education Specialist, U.S. Fish and Wildlife Service, Billings, Montana 59101

[1]Herbst, Robert L., Assistant Secretary of the Interior. Western Association of State Fish and Game Commissioners Meeting. July 11, 1977, Tucson, Arizona.

[2]Fuchs, Estelle and Havinghurst, Robert. To Live On This Earth. Garden City: Doubleday, 1973. pp. 119-20.

[3]McDonald, Arthur. The Schooling of Native America. American Association of Colleges for Teacher Education, 1978. p. 73.

[4]Zasz, Margaret S. Education and the American Indian. University of New Mexico Press, 1977.

[5]American Indian Tribes of Montana and Wyoming. Bureau of Indian Affairs Planning Support Group, 1978. Report No. 262.

[6]Bureau of Indian Affairs Natural Resources Division, Billings Area Office.

[7]Deloria, Vine. History and Background of Indian Education. Navajo Indian College, 1974.

ADDITIONAL SOURCES

Momaday, N. Scott. The World of the American Indian. National Geographic, 1974.

Curtis, Natalie. The Indian Book. Dover Publishing, 1950.

Leopold, Aldo. Sand County Almanac. Oxford University Press, 1966.

McCluhan, Marshall. Touch the Earth. Outer Bridge and Dienstfrey Publishers, 1972.

The Spirit of the Earth - The Voices of the American Indian. Multi Media Productions, 1974.

SERVING INSERVICE FOR THE NORTHERN PLAINS

by Paul Otto

The year was 1972 and I had just begun my first year of teaching as an Assistant Professor of Education at The University of South Dakota. In fact, this was my first full-time teaching position at a university. I had left the University of Wisconsin where I had spent three years in the Ph.D. program. Fresh in my mind was the grueling writing of the dissertation and the oral defense of that project.

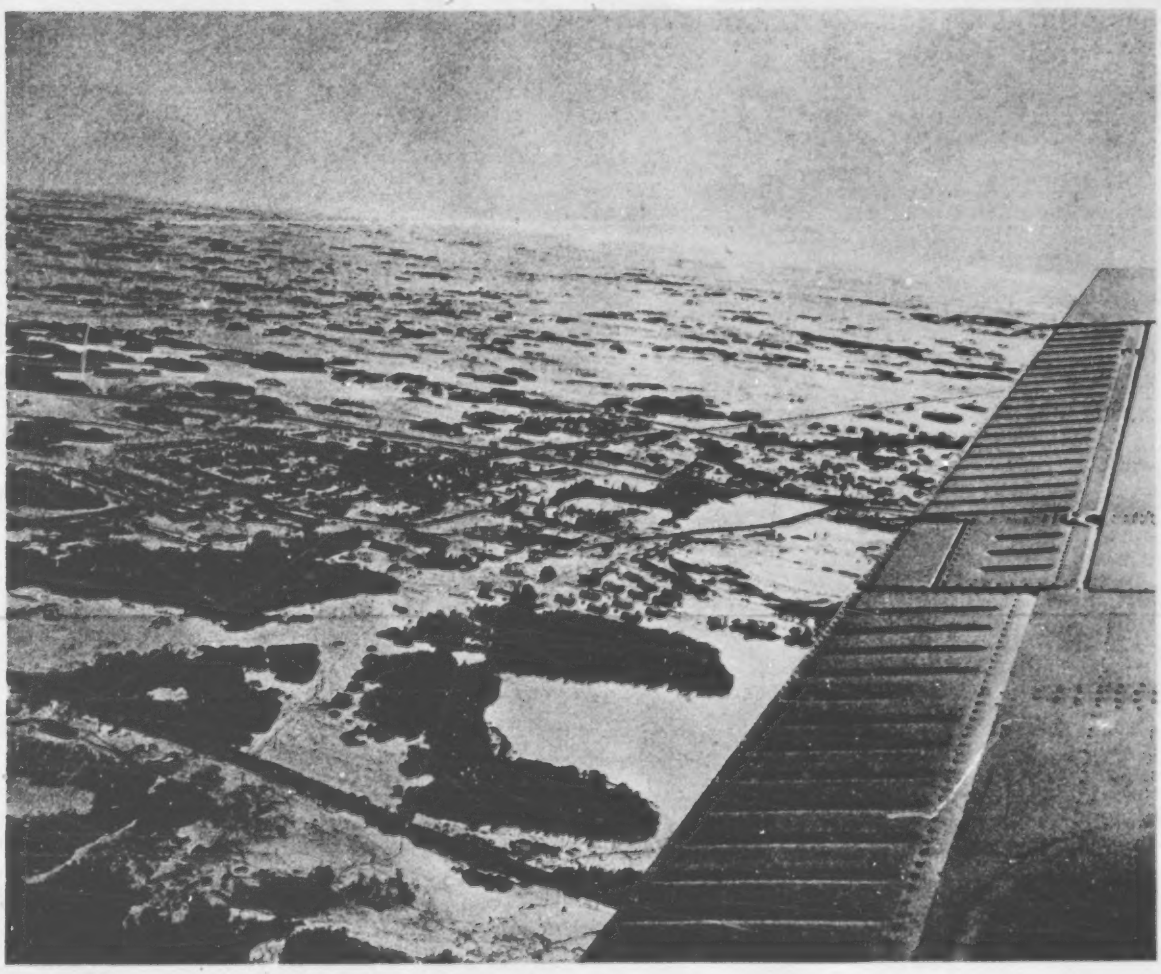
At the beginning of the second semester, the C/I Department Chairman approached me with a problem. It seemed that more teachers had enrolled in an off-campus course than had been anticipated and he needed another instructor to teach a second section. Several reasons were given as to why I was a natural candidate to teach the course. I agreed to teach the extra section beginning that night.

Teaching a night class of teachers is old hat for many experienced professors. Teaching a night class off-campus does not seem unusual for many folks, but this class was located 180 miles from campus, and it was in the dead of winter! Naturally, I would fly! This was truly a unique experience for me. I was not to be alone, however, since the flight involved three other professors.

At about 4:00 p.m. that afternoon, I became part of a carpool which shuttled professors to the airport. One professor could not leave until he had finished teaching his afternoon class. We packed our textbooks for the courses and drove to the airport.

At the airport we met our pilot who helped us load our books and briefcases onto the university's airplane. I was amazed at the pilot since he was dressed in a business suit and tie and wore a small dress hat. The other professors joked and routinely went about the business of pre-flight preparation. I was a bit reticent, as it was my first time flying in the university plane as well as the first time for teaching this night class.

We boarded the airplane. The pilot boarded the plane last, took off his dress hat and donned a set of headphones. He then started the engines on the twin-engined Piper Aztec and ran through a series of operations referenced on a small hand-held card. We taxied to the runway and stopped. Again the pilot ran through a series of checkpoints. We taxied to the end of the runway, turned, and in a matter of moments were roaring down the runway with the ground receding below. The airplane banked and the Missouri River became a series of beautiful ribbons dotted



Cinda Roth

with large sandbars. We followed the river and in a few minutes Gavins Point Dam and the Lewis and Clark Reservoir came into view. Leaving Gavins Point Dam, the pilot set our airplane in a northwesterly direction and placed it on automatic pilot.

I soon learned that the flight was a "milkrun" that would drop off one professor and myself 180 miles northwest at Chamberlain. A second professor would be dropped off 110 miles further down the line at Winner. The fourth had a class to teach at Pine Ridge, located 300 miles from the University. I contented myself with trying to do some reading to refresh my memory for my class.

The airplane began to go into the descent path. Nearing Chamberlain, the pilot banked the plane over the Ft. Randall Dam Reservoir and approached the airport. We touched down and taxied to the terminal. The air outside our airplane was bitterly cold. The wind was blowing about 25 miles per hour and snow squeaked under our shoes. My colleague and I grabbed our boxes of textbooks and briefcases and ran across the runway for the terminal. We were greeted at the gate by a teacher who would drive us into town with his pickup truck. The cargo box on the pickup truck was heaped full of snow. We simply pitched our textbook-laden boxes onto the snow in the back of the pickup and scurried into the cab to enjoy the warmth of the heater. As we bounced toward town, I heard the droning engines from the university airplane as it took off to head for the next stop. I could not resist thinking of my officemate at the University of Wisconsin, saying to myself, "I wish you could see me now!"

Seated in a local restaurant, we ordered dinner. Forty minutes later we taught our classes.

At 10:00 p.m. we dismissed our classes and headed back to the airport. Soon the lights of our plane appeared above the horizon. Again snow squeaked underfoot as we trotted toward the airplane.

Airborne, we chatted briefly about how our classes went and the condition of one of the grass landing strips. Soon, all became quiet except for the steady drone of the Aztec's engines. The pilot occasionally pointed out the lights of a town. I was amazed at the number of mercury vapor lights on ranches and farms. Sparsely populated South Dakota looked almost like a city. We flew through a snowstorm and snowflakes reflecting the strobe lights of the aircraft presented interesting patterns. They appeared much like schools of tiny fish!

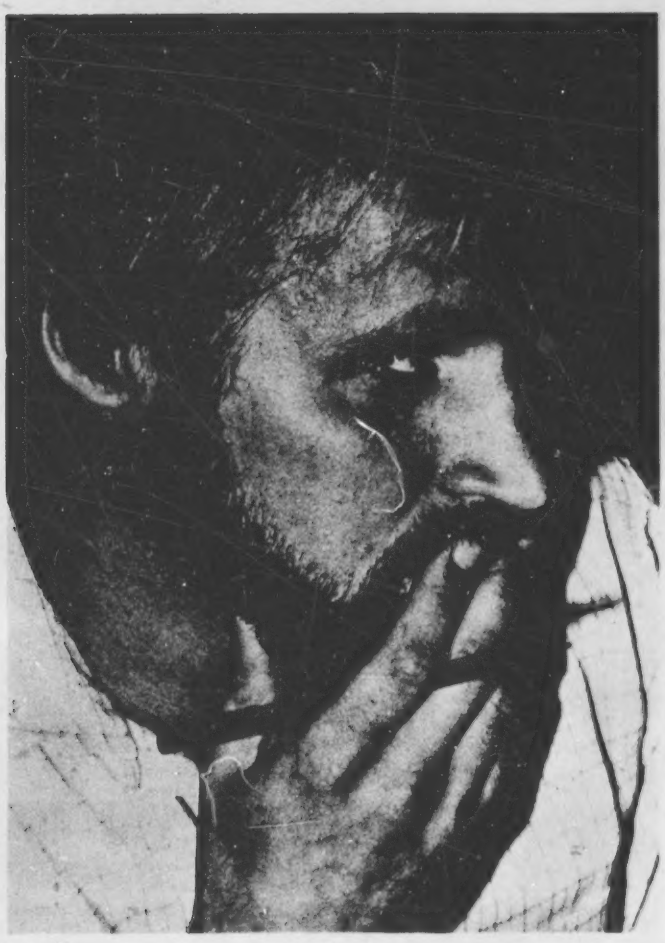
Eventually the red warning lights of the WNAX Yankton radio towers were below us, and I knew we were only 25 miles from home. The airplane descended and soon its wheels touched the runway. "Vermillion International Airport" someone quipped as we taxied to the hangar. The engines stopped and we deplaned. Briefcases and boxes were unloaded under the spotlights on the hangar.

I now learned one more task was required prior to leaving the airport. We had to help the pilot push our airplane into its hangar! He fastened a steering bar to the nosegear of the plane and placed a small wooden ramp for the nosewheel into a pre-determined position. The purpose of the ramp was to raise the nose of the plane, which in turn lowered the tail, so the rudder would clear the header of the door as the airplane was pushed into its hangar! The pilot instructed us to push on the hub of the propellor shafts and not on the propellors. I smelled high-test gasoline fumes as the aircraft was pushed into the hangar. The thought entered my mind as to what the pilot's reaction would be if he misplaced the ramp and the rudder of the airplane would strike the header of the hangar door! With the airplane inside, the little group headed home for some welcome sleep.

There were several times during that spring that we could not meet our classes due to fog, sleet and blizzards which prevented the airplane from flying. On one occasion I drove to meet my class, since all classes had to be made up later in the spring or by extending the time of each meeting. All in all, it was a very interesting experience. I became acquainted with some very nice educators. However, teaching outreach inservice courses in the Northern Plains area is a very unique experience.

IMPROVED SCHOOL CLIMATE: A CASE FOR EXPANSION

by William M. Timpson



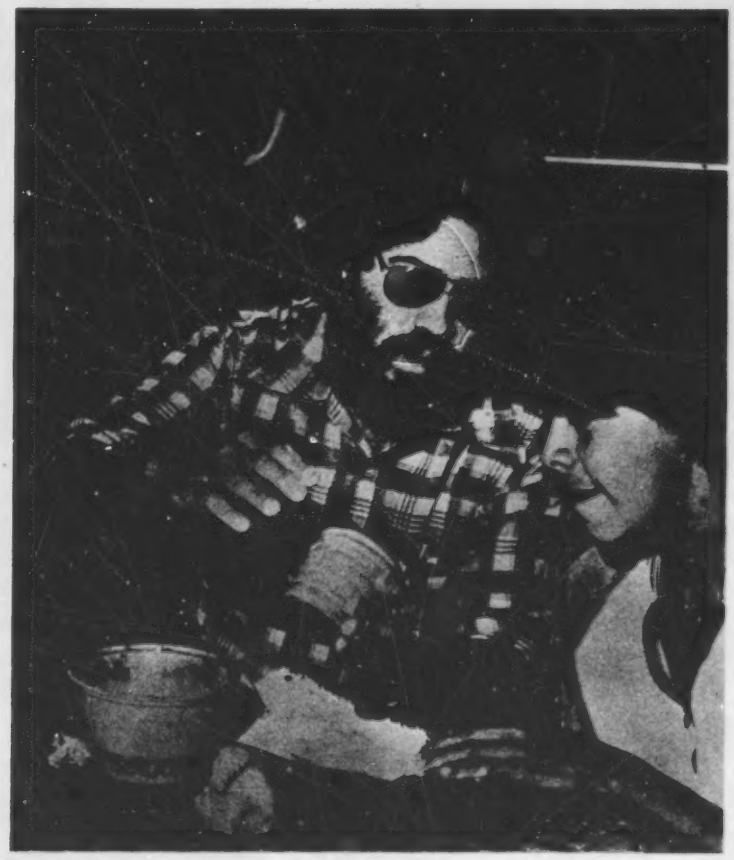
Cinda Roth

School climate has to be one of the more exciting and promising notions to enter the educational arena in a long while. At a time when educators are faced with various and increasing difficulties, an examination of climate offers a very positive and constructive framework for looking at what we are doing and should be doing in our schools. Yet, a consideration of climate should not be limited to our schools alone. For much too long we have limited the scope of education to schooling and, then, turned around to hold school personnel accountable for those same limitations. Our notions of educational responsibility - and consequently climate - must be expanded to include parents, teacher educators and, yes, students themselves. Furthermore, regional characteristics must be addressed climatologically and the strengths of cultures and local institutions built upon.

Climate is a synergistic concept, its improvement often requiring a tortuous process. No one definition or system can contain all answers for all schools. There is no easy cookbook approach. In fact, the myriad of difficulties and obstacles, conflicts and tensions that inevitably emerge may be a very necessary part of the improvement process.

Traditionally, the domain of schools - at least for professional educators - has been the academic, i.e., discipline, knowledge and achievement. Incredible amounts of time and effort are put into teaching and scheduling, for scope and sequence. Yet, talk to students, and to some lesser extent their parents, and the recalled importance of school is something very different; i.e., primarily, friends (Benham et al, 1980). When school climate is addressed, all these "other" variables can come under scrutiny. Measures other than achievement are taken: truancy, tardiness, discipline, self-reports by students, degrees of participation in school activities and decisions. All of these, then, become reflections of a general student morale.

The accumulated research in support of a focus on improved school climate is substantial. In an extensive study and restudy on the role and impact of schooling, both Coleman (1966) and Jencks et al (1972) underscored the need for looking at measures other than achievement, especially where poverty was a factor in predicting success in life. Both studies concluded schools have not been the open avenues to upward mobility in America that many had assumed them to be. Equal educational opportunity is not a statistical reality; and basic socioeconomic inequities cannot be so simply resolved. In fact, schools traditionally have been a part of the problem. By maintaining such a narrow view of their role, academics and educators create failure by placing too much emphasis on achievement. Students who do not or cannot achieve, become losers. The non-achievers become victimized by continual failure, losing confidence in themselves as well as failing in the



Cinda Roth

eyes of their mentors. All too often expectations are established, labels are attached, and a powerful vortex of downward events is set into motion, which only removal from school can reverse.

Gene Howard (1978) insists the school system must be "unrigged". Ways must be found for all students to find success, especially those from poor and less advantaged backgrounds. Where the cards of society may be stacked against certain young people, we educators must be especially careful not to compound the problem, but instead to promote an environment that nurtures, strengthens, and builds esteem and confidence for learners. Improving school climate gives us a road map complete with a legend and set of directions.

The key to this, however, involves some fundamental changes in the way our schools function. Our focus must shift from teaching to learning, from control to involvement, from product to process. So long as curriculum comes down from on high, rules are imposed and punishment/failure are the consequences for those who do not or cannot fit. Once all concerned become involved in the decision-making process, once responsibility and accountability become the province of students and parents, not just that of school staff, then improvement will be forthcoming. By such changes, individual needs, interests and goals will be better assessed and the curriculum made more responsive. When people learn to listen and communicate more effectively, many of the problems currently affecting school climate will be resolved.

Climate, however, must be expanded beyond student concerns to include those of staff and community as well. As with students, staff morale must also be assessed, their needs, interests and goals attended to, and their input solicited for all school-based decisions. Working conditions involve more than pay and fringe benefits. Stress and burnout are common topics in today's educational journals. Professionalism, respect, care and concern, a feeling that individuals can make a difference, provide

Cinda Roth

essential yet often neglected aspects of teacher and school staff needs. Industry is also slowly awakening to its responsibility for employees at all levels, their needs and importance in the system, if the best decisions are to be made and productivity/profitability are to be improved. With respect to communities, both Coleman and Jencks make telling arguments for the power of the out-of-school environment in support of the educational process. Parents must be given a more meaningful voice in school affairs. Community resources must be incorporated into the curriculum with residents from all walks of life serving as role models. School facilities must be opened for greater community utilization. In this way, schools will more effectively merge with their communities and, consequently, be better able to capitalize upon those environmental influences.

Climate must further be expanded to include universities where educational personnel are trained. Not only must the background, content and skills for improving school climate be taught, but opportunities for practice must be provided as well. An adequate rationale must be established; techniques and skills must be developed. Perhaps most importantly, a positive educational climate must be modeled and opportunities for practice provided. Prospective and working teachers alike must be given regular review and input into program decisions. Constructive feedback about university classes must be solicited on a continuing basis. Learner needs, cognitive and affective, academic and personal, must be regularly assessed and individualized training sequences developed. Extensive, varied and relevant field experiences must be provided under adequate supervision, if skills are to be practiced and perfected. For much too long the university faculty involved in teacher education have failed to model their own pedagogy. Moreover, by tying salary increments to advanced coursework, a captive audience relationship has been established, with a parallel decline in client responsiveness. University climate has suffered accordingly.

School districts have similar responsibilities for soliciting input from university faculty. A mutually supportive and reciprocal relationship must be established between campus and field. Only, then, can each benefit maximally from the other.

I have argued a case for the intrinsic value of a school climate thrust; and an expanded one at that. Now, I would like to argue for some regional perspectives as well.

It is my contention that the West, in general, and Colorado, in particular, offer unique advantages for school climate orientation. By almost any measure you care to choose, the West is healthy. People are friendly, and life is moderately paced. The economy is robust, towns are booming and unemployment is low. Energy is abundant, long-term prosperity seems almost guaranteed. The climate is attractive, the scenery spectacular with lots of space for all.

But it is in the political arena that this "positive climate" can most readily be seen. While much of the rest of the nation appears mired in a deep malaise about its responsibilities in this democracy, all reflected in pitifully low voter turnouts, involving much less than half the registered electorate, Colorado sports a voter participation record of well above two-thirds. It is my contention that this healthy climate is an ideal base upon which to expand notions of participation and involvement in the educational system.

School climate can improve and schools will be better places for learning if they do. Achievement scores may remain unchanged, but so much of what schools are is non-academic. To improve, however, much will need to change. A different orientation to education will have to emerge, one that stresses the processes of student participation and involvement over the products of narrow content and academic achievement. To do so, the surrounding communities and the neighboring teacher education institutions must also be involved. Skills must be developed and new techniques mastered. As previously mentioned, no simple definitions, or easy cookbook recipes, exist to follow. The struggle involved is a very necessary part of the process. Climate is a local factor and its improvement must involve the many and diverse constituents of a school system. By opening up our channels of communication, we can also begin to resolve some of the age old differences that separate us - differences that reflect long standing prejudices and get in the way of meaningful interaction. Once we learn the skills of effective communication and participation, we will be in a much better position to utilize the varied and rich resources that our pluralistically talented people possess. The end result of an improved school climate may, in fact, be an education that is truly multicultural.

Benham, B.J., Giesen, P., and Oakes, J. A Study of Schooling, Students' Experiences in Schools. Phi Delta Kappan, 1980, 61, 337-340.

Howard, E. R. School Desk Discipline Book, New York: Parker, 1978.

Jencks, C., Smith, M., Acland, H., Bane, M.J., Cohen, D., Gintis, H., Heyns, B., and Mitchelson, S. Inequality: A Reassessment of Family and Schooling in America. New York: Basic Books, 1972.

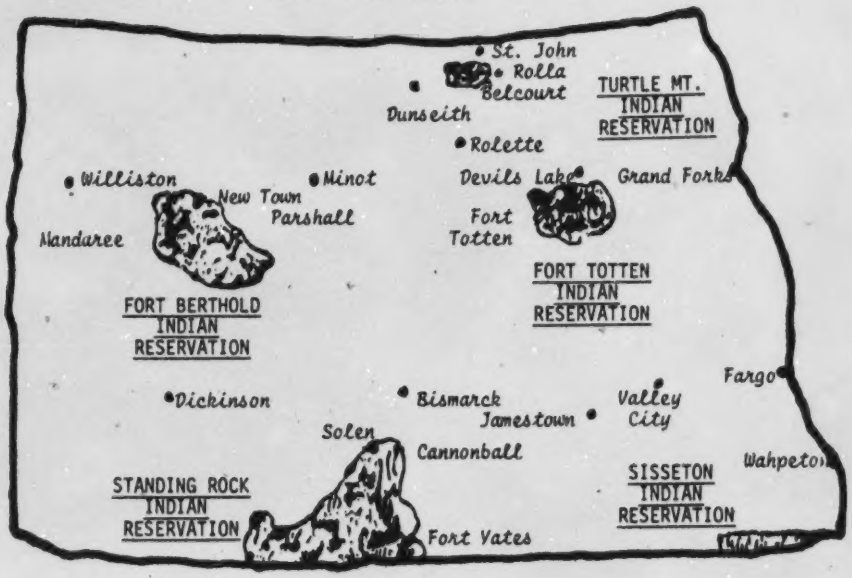
Coleman, J.S., Campbell, E.Q., Hobson, C.J., McPartland, J., Mood, A.M., Weinfeld, F.D., and York, R.L. Equality of Educational Opportunity. Washington, D.C.: U.S. Dept. of Health, Education and Welfare, U.S. Government Printing Office, 1966.

ISOLATION: A MATTER OF MILES AND ATTITUDE

by Donald K. Lemon

Cinda Roth

MAP OF NORTH DAKOTA



North Dakota is a part of the large land area often referred to as America's Northern Plains. The eastern third of our state lies in a gigantic glacial lake bed known as the Lake Agassiz Valley. The Red River of the north is the historic remnant of this lake and is the only major river in the continental United States which flows north. The most fertile and productive land on earth may be contained in this watershed valley shared by North Dakota and Minnesota.

Central North Dakota is given over to rolling hills, shelter belts, and farmsteads which were agriculturally developed by immigrants primarily from Northern Europe. Here the high-grass prairie is particularly suited to cultivating small grain, including durum wheat. Durum is the wheatstock from which pasta products such as macaroni and spaghetti are made and our farmers lead the nation in its production.

Southwestern North Dakota is less agriculturally productive but still considered good country for cattle. The Badlands, which extend north out of the Black Hills, create a rugged terrain that at its surface is suited for ranching. In recent years oil, gas, and coal production have played a major role in developing western North Dakota; the impact of extensive fuel resource exploration on this potentially energy rich area has begun to make major changes in the lifestyle of the people and the economics of the area.

During summer, North Dakota glows with a verdant emerald richness; contrastingly, the land is snow covered and appears desolate in winter. Because of the flatness of our terrain and the ease with which ever-present winds can move snow across our landscape, North Dakota is sometimes viewed as the Siberia of North America; however, this description presents an uninformed picture and relates more to images of our winters than to our other seasons.

North Dakota is home to a number of tribes of American Indians, and was once a major feeding ground for 5,000,000 bison that roamed the High Plains. The west-central part of our state contains the Fort Berthold Indian Reservation which is home to The Three Affiliated Tribes - the Hidatsah, the Mandan and the Arikara. Fort Berthold Reservation is spread out around the shores of Lake Sakakawea, created by the Garrison Dam. The distance around this large lake makes communication more difficult than that encountered on most reservations.

The Standing Rock Indian Reservation spans the middle region of both North and South Dakota. The Sioux who live in its North Dakota section tend to speak Dakota, while those living in South Dakota tend to speak Lakota Sioux. General George Armstrong Custer and the ill-fated Seventh Cavalry began their march to the Little Big Horn from Ft. Lincoln, which was part of a chain of forts along the Missouri River just north of the Standing Rock Reservation.

Fort Totten Indian Reservation is in east-central North Dakota. This reservation has the smallest population of any in the state and serves a band of the Sioux nation known as the Devils Lake Sioux. Devils Lake is the largest natural lake in North Dakota. Until recently, it was classified as a dying resource. Recently, however, efforts have been made to revive it so that it has again become a major recreational area for hunting and fishing.

In the north-central section of North Dakota lies our smallest (in terms of land area) reservation -

the Turtle Mountain Indian Reservation. It is populated by the Turtle Mountain Chippewa Band, sometimes referred to as the Ojibwa or the Plains Ojibwa. Even though this is the smallest reservation in the state, it has the largest Indian population and is reputed to have the largest per capita Indian population of any reservation in the United States. The Chippewa of this reservation are said to belong historically to the larger Algonquian family and have migrated to this area from their cultural and historical origins near what is now Sault Sainte Marie, Michigan.

The University of North Dakota in Grand Forks is located on the eastern border of the state. The University is 180 miles from Belcourt, agency headquarters of the Turtle Mountain Indian reservation. The 3-1/2 hour drive from Belcourt to Grand Forks along black-top roads takes the rider between large fields rich with grain in the summer and deep with snow in the winter, only occasionally interrupted by small communities. The delivery of educational services between distant points in an environment, which is gentle and hospitable in the summer but severe and adverse in the winter, may be enhanced by some additional points about North Dakota itself.

North Dakota ranks as the seventeenth largest in geographic area among the 50 states. Its population of approximately 617,000 persons includes nearly 14,000 American Indians. To think that so few people populate such a vast area gives the reader a clear indication of the sparsity of population here. Knowing, too, that the major share of this population resides along the eastern side of the state, further alerts the reader to the extreme sparsity of population in the west. People living here can and do have privacy, so privacy is not a guarded commodity as it may be in more populated areas. Motorist stranded along a roadside may expect that fellow travelers will stop and provide assistance. Merchants in small towns cash checks for unknown travelers with modest identification. People are generally friendly, supportive, and helpful. The business and economic base of North Dakota derives primarily out of agricultural and agribusiness interests. Farmers and others generally share the conservative values of an agrarian society.

People's hospitality and supportiveness in this region greatly reduce the security concerns which an individual might experience in the delivery of a program to metropolitan areas. Thus, University of North Dakota IHE faculty are willing to trek off to the reservation, and interns are willing to come east to the University community, all with positive anticipation of the outcomes for themselves and those they wish to serve.

A shared difficulty for those personnel who provide and those who receive services from Teacher Corps in North Dakota and, in a larger sense, for the state as a whole, is the multitude of problems created by distance. Distance and distance related energy costs make travel expensive in terms of dollars and professional time utilization. These inherent negative expenses are offset by the opportunities people have for enjoying our privacy, clean air, and sense of personal freedom. In balance our experience has been that, because of distance, the people who continue program relationships achieve heightened senses of commitment, motivation, and accomplishment which comes from overcoming the obstacles of our isolation. In effect, the difficulties of our collaboration are the springboard to our successes.

OUTREACH AND INSERVICE EDUCATION IN MONTANA: A NEW TECHNOLOGY FOR AN OLD PROBLEM

by Harry F. Lee and
Franz A. Nowotny

Cinda Roth

Cinda Roth

Demands on higher education and on In-Service Education are accelerating at a time when factors constraining higher education and the delivery of educational services are increasing.

Major constraint factors encountered include the demography of post-secondary school enrollments, the accountability movement, tax revolts and rising energy costs. The impact of the demography of enrollment, although uneven nationally, is being felt by all of higher education, and the 1980's will prove to be difficult for colleges and universities. Average anticipated enrollments are expected to decline about ten percent nationally. The accountability movement has led to budget cuts or steady state economics in higher education funding levels. Howard Jarvis, now a household word, is synonymous with reduced government spending and tax cuts. The energy crisis, with its effects on cost and availability of fuel, adds a further constraint.

The increased demand for more equal access to education is due in a large measure to the growth of the lifelong learning movement. Increased demands for In-Service and Outreach coupled with rising constraints affecting delivery of educational services are the challenge, demanding new approaches and new solutions.

The Setting

The implementation of effective In-Service Education in Montana necessitates confronting the ruralness of the region which is expressed in sparse populations, isolation of communities, small schools, and long distances from college campuses and state agencies; i.e., the Office of Public Instruction located in Helena, which is in the middle of the state, is over 500 miles from the town of Plentywood.

Eastern Montana, the area served by our College, comprises 42,000 square miles with a population density of less than two persons per square mile. To illustrate this point further, one could comfortably fit the states of Vermont, New Hampshire, Massachusetts, Connecticut and Rhode Island into the geographic region served by the college.

The typical community in this region is small, rural and isolated. The small towns are further characterized by having inadequate or no libraries, theatres, or medical facilities; in many instances, one might have to travel as much as 75 to 100 miles to the nearest doctor or hospital.

Montana still has 614 separate functioning public school districts because of the widespread distribution of a rather sparse population of under 700,000 people. About one-third of the total schools are staffed by one, two or three teachers. Secondary schools, which are usually consolidated from smaller districts, tend also to be small by national standards.

Many counties in the region are characterized by declining populations. Communities located on or near Indian reservations in Eastern Montana, however, are showing population gains - largely because of energy related developments. A large part of this area is rich with coal deposits estimated to contain as much as 45 percent of the total national coal reserves; consequently, this phenomena is producing boom towns.

Schools in the region are characterized by high teacher turnover rates, since many of the teachers are unable to adapt to the rural environment, and because they often use the small rural schools as a stepping stone to obtaining professional positions in more urban areas. This phenomena is especially true for schools located on or near Indian reservations, which in turn results in a lack of continuity of program content and staff. The larger towns and cities tend to retain more stable teaching staffs and programs in comparison with the national trends.

Eastern Montana College, the third largest unit in the Montana University System, is charged in its mission to serve the educational needs of the area's population. Given a unique geographic/demographic situation, the college provides services to the people of a diverse metropolitan area (Billings and Yellowstone County) while at the same time providing educational opportunities to the people of the rural eastern half of the state and to northern Wyoming.

The huge distances separating people, and especially teachers, in this rural region requires efficient planning of Outreach and In-Service opportunities to make them cost effective. In order to achieve this, new strategies have had to be devised to meet the In-Service and Outreach challenges of the 80's and the future.

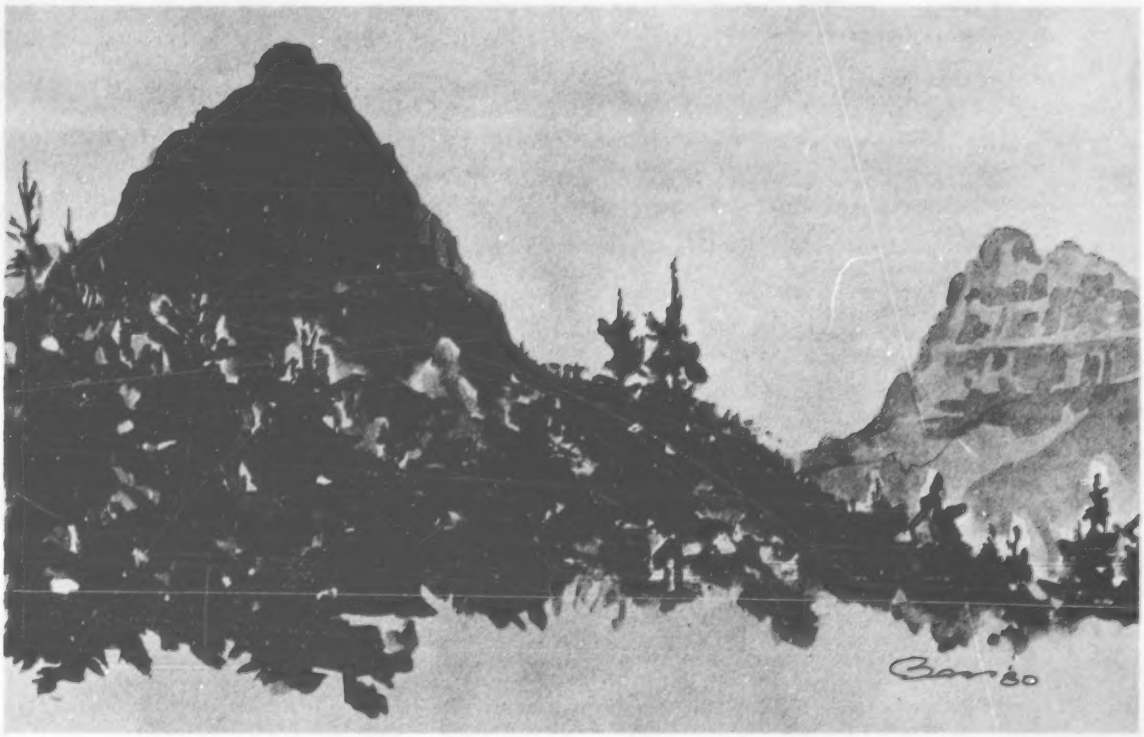
The Approach

In response to these challenges, a telecommunication network was developed called ETS, the Educational Telecommunication System. This was accomplished after extensively researching alternative ways in which quality education programs could be delivered in an effective and cost-efficent manner.

The ETS was implemented because it had ingredients necessary to meet the challenges of the 80's in Montana's particular setting. The ETS is a huge telephone party line, capable of tying together specifically designated learning centers using the telephone as the interactive media. Learning Centers currently in operation are located in Lame Deer on the Northern Cheyenne Indian Reservation (Teacher Corps Site), Colstrip, Hardin, Lewistown, Harlowtown, Roundup, Baker, Miles City, Glendive, Red Lodge and Great Falls, Montana.

Operationally the system used Mountain Bell Telephone Company transmission facilities, with local station equipment consisting of push-to-activate microphones and a convener. The control center, located at Eastern Montana College, provides for program control. The Meet-Me-Bridge is the heart of the system and has capacity of tying together twenty locations in-state and/or out-of-state, when one program or teleconference is taking place. The Bridge is programmed to allow for simultaneous offering of up to four different In-Service programs, or other combinations making up a total of 20 ports (sites).

Using this interactive telecommunication media, students and faculty can be miles apart, and programs can originate from anywhere in the system providing easy access to distant educational resources. The additional adaptive capacities are achieved when visual materials are sent in advance to the learning sites, which are equipped with movie, slide and overhead projectors.



College credit bearing courses included a Math program offered on the Northern Cheyenne Reservation, "Introduction to Music Therapy," which was taught by Eastern's faculty and offered in Bozeman at Montana State College and in Missoula at the University of Montana, and a course titled "Women and the Frontier Experience." Non-credit bearing courses have included a program about depression taught by staff from the University of Pennsylvania to Mental Health personnel in Montana, and a course for staff at the Montana School for the Blind taught by instructors from Eastern Montana College's Institute for Habilitative Services. Additional offerings have included a workshop on home learning environments for residents of the Fort Belnap Indian Reservation, and various forums involving statewide meetings for a variety of constituent groups.

The Teacher Corps program was and is significantly involved in the testing and evaluation of the system through its pre-service and in-service programming. The Teacher Corps' site in Lame Deer became the first ETS Learning Center in Montana. The first programs using ETS were offered during the fall quarter, 1979. ETS freed Teacher Corps from traditional constraints associated with providing in-service education to rural areas. A key function of the site was its specific role to serve as a testing and evaluation site, not only for Lame Deer but for the proposed statewide ETS network.

Several different delivery models were tested and evaluated in terms of user satisfaction, learner outcomes, technical capabilities, requirements of origination, transmission, voice control and student participation. While all three models used were a mixture of the traditional face-to-face instruction and teleconferencing, they were significantly different from each other to be considered separate models.

Model I features a campus-based instructor with the class at a distant learning center site. An example of a course using this model was the Mathematics class offered on the Northern Cheyenne Reservation. A tutor employed at the site was present for each class meeting and assisted the instructor by illustrating concepts and problems on a chalkboard. Student materials and supplementary visuals including videotape were sent to the site prior to each class meeting. Also prior to each class's beginning, the instructor and tutor had meetings to plan strategy for that session and the tutor's one-to-one work with students. The instructor traveled to Lame Deer for face-to-face instruction and student advisement three times during the quarter. Face-to-face sessions served two purposes: (1) to provide students with personal contact with the instructor, and (2) to provide opportunities for the instructor to consolidate relationships between students' understanding and the subject matter.

During the winter quarter, 1980, this model was used with some modifications for another mathematics course. One modification in the second mathematics course was the introduction of videotape activities and lectures followed by a teleconference between the instructor and the students. A second modification was a role reversal, whereby the instructor was the passive listener in the problem solving process. The students and their tutor would work through problems,

Barr'00

while the instructor listened and assisted where necessary, via ETS.

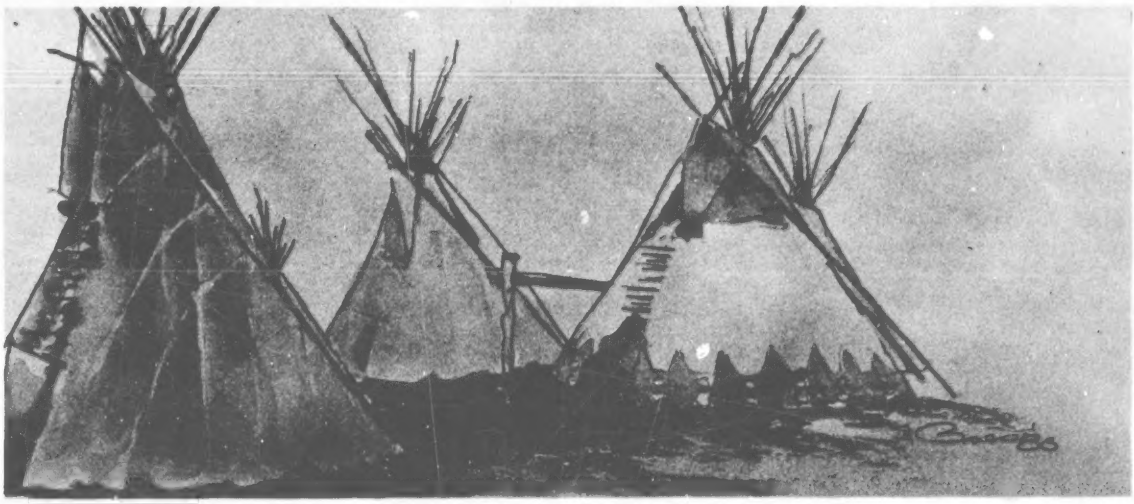
Model II involved more extensive, face-to-face contact between the students and their professors. The basic structure here was similar to the one used in Model I except that the instructor was on site for half of the classes and used ETS for the other half. Also, no tutor was involved. A course entitled "Improvement of Instruction in Art," which involved a great deal of individual work, can be cited as an example using the Model II approach. The instructor made question-and-answer-oriented presentations using ETS. At alternative times, the instructor met on site for lab work using art methods and materials in face-to-face situations. Another course, "Improvement of Instruction in Social Studies," followed the same format. Every other week the instructor prepared a discussion/lecture presentation to be delivered via the telephone system, followed by alternate weeks of face-to-face meetings with the class. Most of the face-to-face group activities were experiences requiring group process work, and using modern methods of teaching Social Studies in the elementary school.

Evaluation and Outlook

Preliminary evidence, from initial uses of ETS, indicates that this new approach to inservice education and outreach provides a viable alternative - both from a user point of view and from a cost effective/management point of view.

The three Models tested have shown promise, with each Model having its own specific area of strength. Data gathered from evaluations conducted on mathematics courses, for example, have shown that there is a definite need for a tutor or assistant teacher to be present at the ETS site regardless of which model is used. Evaluation results of other courses additionally indicate that a contract person in the class at the ETS originating site, acting as a liaison between the class and the instructor, significantly improved the learning environments. In the three models piloted, the tutor or liaison person for the telecommunication receivers appears to be a critical element to success.

The data gathered from the evaluation of the pilot models is utilized to modify teaching styles and course formats, through providing a structured basis



Model III is significantly different from I and II. Using this model, the instructor teaches two classes simultaneously; one class is located on campus and another class is located at the site in Lame Deer using ETS. This model allows students at each location the opportunity to exchange ideas and learn from each other. In this model the instructor alternates between sites, broadcasting from whichever he happens to be located in that week. A course taught using this model was "Curriculum Foundations and Construction." The two student groups were professionally similar; however, the Lame Deer class was taught in a rural setting with a large Native American population, while the class in Billings was largely urban and Caucasian.

for faculty training in ETS delivery of instruction. The results obtained through this testing component are valuable and provide the foundation for strategies to be employed in the 40 to 50 Learning Centers, which will be established over the next two years.

Other units in the University System and other providers of lifelong learning activities have expressed an interest in the system. Thus, the prospect appears strong that the system will emerge as a comprehensive statewide network within a relatively short time period. More importantly, however, is the now feasible opportunity to develop alternative high quality modes of reducing isolation for Montana's distant communities and residents.